Ethernet Remote I/O Modules



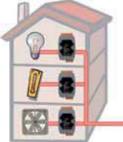
- Multi-Function Web Based Ethernet I/O Modules-Models Available For Thermocouple, **RTD, Analog Voltage and Current Input**
- Built-In Web Server for Remote Configuration and I/O Monitoring/Control
- ✓ Web HMI
- Communications Security
- ✓ Supports MODBUS® TCP and UDP Protocols
- OME-PET-7000 Series Features PoE (Powerover-Ethernet)

The OME-ET-7000/OME-PET-7000 Series, a web-based Ethernet I/O module, features a built-in web server which allows configuration, I/O monitoring and I/O control by simply using a regular web browser. Remote control is as easy as browsing the Internet.

With the web HMI function, programming or HTML skills are not required; creating dynamic and attractive web pages for I/O monitoring and I/O control is easy. The OME-ET-7000/OME-PET-7000 Series offers easy and safe access for users at any time, from any location. In addition, the OME-ET-7000/OME-PET-7000 Series also supports MODBUS TCP protocol that makes perfect integration to SCADA software.

OME-PET-7000 features "PoE" where not only data but also power is carried through an Ethernet cable. This feature makes installation of OME-PET-7000 easy. No more unnecessary wires; only an ethernet cable that takes care of everything in the field.

Applications



Building Automation, Factory Automation, Machine Automation, Remote Maintenance, Remote Diagnosis, Testing Equipment.



PoE Switch



OMEGACARE[™] extended warranty program is available for this series. Ask your sales representative for full details when placing an order. OMEGACARES™ covers parts, labor and equivalent loaners.



Features

1. Power over Ethernet (PoE)

The OME-PET-7000 series module can be powered by an IEEE802.3af compliant PoE switch. Both data and power can be carried by an Ethernet cable eliminating the need for additional wiring and power supply.



2. Built-in Web Server

Each OME-ET-7000/OME-PET-7000 module has a Built-in web server that allows the users to easily configure, monitor and control the module from a remote location using a regular web browser.

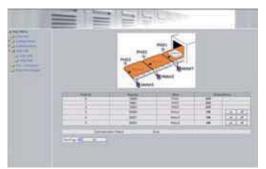




Data Acquisition Systems

3. Web HMI

The Web HMI function allows the users to create dynamic and attractive web pages to monitor and control the I/O points. Users can upload specific I/O layout pictures (bmp, jpg, gif format) and define a description for each I/O point. No HTML or Java skills are needed to create the web pages.



4. Communication Security

Account and password are needed when logging into the OME-ET-7000 web server. An IP address filter is also included, which can be used to allow or deny connections with specific IP addresses.

5. Support for both MODBUS® TCP and MODBUS UDP Protocols

The MODBUS TCP, MODBUS UDP slave function on the Ethernet port can be used to provide data to remote SCADA software. A free MODBUS software development toolkit is included on the utility software CD that is supplied with the OME-ET-7000/ OME-PET-7000 Series modules.

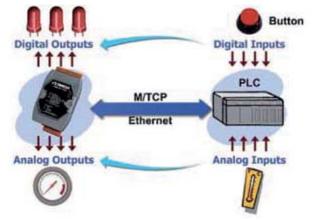
6. Built-in I/O

Various I/O components are mixed with multiple channels in a single module, which provides the most cost effective I/O usage and enhances performance of the I/O operations.

7. Dual Watchdog

The Dual Watchdog consists of a module Watchdog and a communication Watchdog. The action of AO/DO are also associated with the Dual Watchdog.

Module Watchdog is a Built-in hardware circuit to monitor the operation of the module and will reset the CPU if a failure occurs in the hardware or the software. Then the power-on value of AO/DO will be loaded. Communication Watchdog is a software function to monitor the communication between the host and the OME-ET-7000/OME-PET-7000 module. The timeout of the communication Watchdog is programmable, when the OME-ET-7000/OME-PET-7000 doesn't receive commands from the host for a while, the watchdog forces the AO/DO to pre-programmed Safe Value to prevent unpredicatable damage of the connected devices.



8. Power-on Value and Safe Value

Besides setting by the set AO/DO commands, the AO/DO can be set under two other conditions.

Power-on Value: The Power-on Value is loaded into the AO/DO under 3 conditions: Power-on, reset by Module Watchdog, reset by reset command.

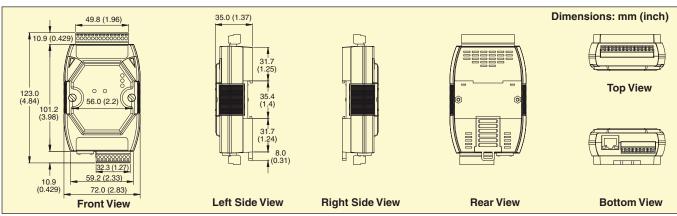
Safe Value: When the Communication Watchdog is enabled and a Communication Watchdog timeout occurs, the "safe value" is loaded into the AO/DO.

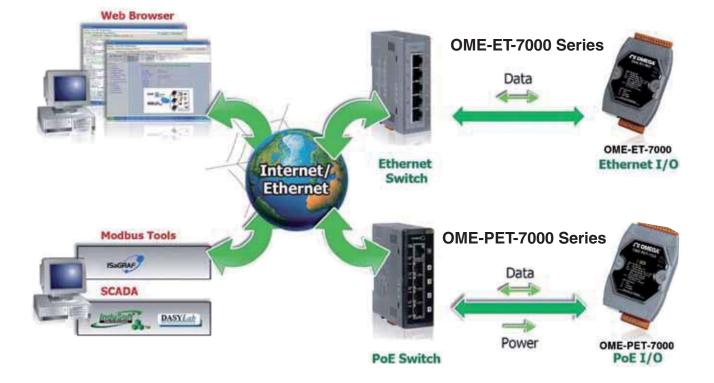
9. I/O Pair Connection

This function is used to create a AI/DI to AO/DO pair through the Ethernet. Once the configuration is completed, the OME-ET-7000/OME-PET-7000 module can poll the status of remote AI/DI devices and then use the MODBUS TCP protocol to continuously write to local AO/DO channels in the background.

10. Highly Reliable Under Harsh Environments

- Wide Operating Temperature Range: -25 to 75°C (-13 to 167°F)
- Storage Temperature: -30 to 80°C (-22 to 176°F)
- Humidity 10 to 90% RH (non-condensing)





Analog Input Models

		AI		DO		
Model No.	Channel	Voltage and Current Input	Sensor Input	Channel	Туре	Sink/ Source
OME-ET-7015 OME-PET-7015	7	_	RTD: Pt100, Pt1000, Ni120, Cu100, Cu1000	_	_	_
OME-ET-7017 OME-PET-7017	8	±150 mV, ±500 mV, ±1 V, ±5 V, ±10 V, ±20 mA, 0 to 20 mA, 4 to 20 mA	_	4	Open collector	Sink
OME-ET-7017-10 OME-PET-7017-10	10/20	±150 mV, ±500 mV, ±1 V, ±5 V, ±10 V, ±20 mA, 0 to 20 mA, 4 to 20 mA	_	_	_	_
OME-ET-7018Z OME-PET-7018Z	10	±15 mV, ±50 mV, ±100 mV, ±500 mV, ±1 V, ±2.5 V ±20 mA, 0 to 20 mA, 4 to 20 mA	Thermocouple: J, K, T, E, R, S, B, N, C, L, M, and LDIN43710	6	Open collector	Sink
OME-ET-7019Z OME-PET-7019Z	10	±15 mV, ±50 mV, ±100 mV, ±150 mV, ±500 mV, ±1 V, ±5 V, ±10 V ±20 mA, 0 to 20 mA, 4 to 20 mA	Thermocouple: J, K, T, E, R, S, B, N, C, L, M, and LDIN43710	6	Open collector	Sink

Note: Use OME-ET-7018Z/OME-PET-7018Z and OME-ET-7019Z/OME-PET-7019Z for extremely accurate thermocouple measurement.

NFW#



Multifunction I/O

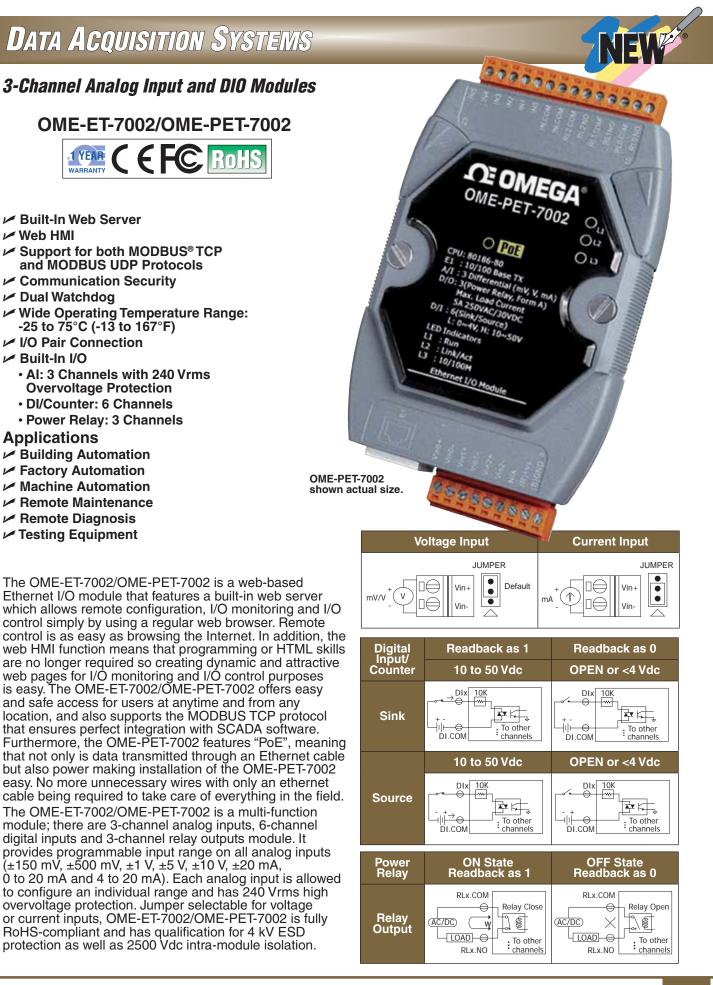
		AI			AO	DI/	Counter	D	0
Model No.	Channel	Voltage and Current Input	Sensor Input	Channel	Voltage and Current Output	Channel	Contact	Channel	Туре
OME-ET-7002 OME-PET-7002	3	± 150 mV, ± 500 mV, ± 1 V, ± 5 V, ± 10 V, +0 mA to 20 mA, ± 20 mA, 4 to 20 mA	_	_	_	6	Wet (sink, source)	3	Power relay (form A)
OME-ET-7026 OME-PET-7026	6	±150 mV, ±500 mV, ±1 V, ± 5 V, ±10 V, 0 to 20 mA, ±20 mA, 4 to 20 mA	_	2	0 to 5 V, ±5 V, 0 to 10 V, ±10 V, 0 to 20 mA, 4 to 20 mA	2	Dry (source), wet (sink, source)	2	Open collector (sink)

Digital I/O

	DI/Counter		DO				
Model No.	Channel	Contact	Sink/Source	Channel	Туре	Sink/Source	Maximum Load Current @ 25°C
OME-ET-7042 OME-PET-7042	_	_	_	16	Open collector	Sink	100 mA/channel
OME-ET-7044 OME-PET-7044	8	Wet	Sink, source	8	Open collector	Sink	300 mA/channel
OME-ET-7050 OME-PET-7050	12	Wet	Sink, source	6	Open collector	Sink	100 mA/channel
OME-ET-7051 OME-PET-7051	16	Wet	Sink, source		_	_	_
OME-ET-7052 OME-PET-7052	8	Wet	Sink, source	8	Open collector	Source	650 mA/channel
OME-ET-7053 OME-PET-7053	16	Dry	Source		_	_	_

Relay Output and Digital Input

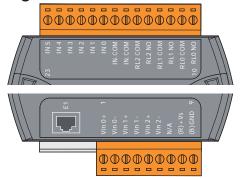
	Relay Output				DI/Counter		
Model No.	Channel	Relay	Туре	Maximum Load Current @ 25°C	Channel	Contact	Sink/Source
OME-ET-7060 OME-PET-7060	6	Power relay	Form A (SPST N.O.)	5.0 A/channel	6	Wet	Sink, source
OME-ET-7067 OME-PET-7067	8	Power relay	Form A (SPST N.O.)	5.0 A/channel	—	—	_



System Specifications

System Specificat					
Models	OME-ET-7002	OME-PET-7002			
Software					
Built-in Web Server	Yes				
Web HMI	Y	′es			
I/O Pair Connection	Y	′es			
Communication					
Ethernet Port		X with Auto MDI/ DI-X			
PoE		Yes			
Protocol	MODBUS TCP	MODBUS UDP			
Security		d and IP filter			
	Yes, module	(0.8 seconds),			
Dual Watchdog	communication	(programmable)			
LED Indicators					
L1 (System Running)	Y	⁄es			
L2 (Ethernet Link/Act)		/es			
L2 (Ethernet Link/Act) L3 (Ethernet 10/100 M Speed)	Yes				
PoE Power		Yes			
2-Way Isolation		100			
Ethernet	1500 Vdc				
I/O	2500 Vdc	2500 Vdc			
EMS Protection	2000 100	2000 Vuc			
	4 kV contact for	or each terminal			
ESD (IEC 61000-4-2)	and 8 kV air fo	or random point			
EFT (IEC 61000-4-4)		or power			
Surge (IEC 61000-4-5)		or power			
Power Requirements					
Reverse Polarity	,	,			
Protection	Y	⁄es			
Powered from	Yes, 10 to	Yes, 12 to			
Terminal Block	30 Vdc	48 Vdc			
Powered from PoE	_	Yes, IEEE			
	· · ·	802.3af, Class1			
Consumption	1.	7 W			
Mechanical					
Dimensions (W x L x D)	72 x 123 x 35 mm (2.8 x 4.8 x 1.4)				
Installation	DIN-rail or wall mounting				
Environment					
Operating Temperature	-25 to 75°C	(-13 to 167°F)			
Storage Temperature	-30 to 80°C	(-22 to 176°F)			
Humidity		non-condensing			

Pin Assignments



DATA ACQUISITION SYSTEMS

I/O Specifications

-					
Analog Inpu		0 (1145			
Channels		3 (differential)			
Туре		±150 mV, ±500 mV, ±1V, ±5 V, ±10 V + 0 mA to + 20 mA, ±20 mA, 4 to 20 mA (jumper selectable)			
Individual C Configurati	on	Yes			
Resolution	Normal Mode	16-bit			
nesolution	Fast Mode	12-bit			
Sampling	Normal Mode	10 sar	nples/second (total)		
Rate	Fast Mode	60 sar	nples/second (total)		
Acourcov	Normal Mode				
Accuracy	Fast Mode	±0.5%	or better		
Zero Drift		±20 μ\	//°C		
Span Drift		±25 pp	om/°C		
Overvoltage	e Protection	240 Vr			
Overcurren	t Protection	50 mA maxim	maximum at 110 Vdc/Vac		
Input	Voltage	2 MΩ			
Impedance	Current	124 Ω			
	ode Rejection		minimum		
	de Rejection	100 dE	3		
Digital Inpu	t/Counter				
Channels	Channels		6		
Contact		Wet co	ontact		
	e (NPN/PNP)	Sink/source			
On Voltage		10 Vdc to 50 Vdc			
Off Voltage		4 Vdc maximum			
Input Impec	lance	10 kΩ, 0.5W			
	Channels	6			
	Maximum Count	4,294,967,285 (32-bit)			
	Maximum Input Frequency Minimum	100 Hz			
	Pulse Width	5 ms			
	e Protection	50 Vdo	2		
Power Relay	у				
Channels		3			
Туре		Power	relay, Form A (SPST N.O.)		
Operating V	/oltage Range	250 Vac/30 Vdc			
	.oad Current	5.0A/channel at 25°C			
Operate Tim	ne	6 ms (typical)			
Release Tim	ne	3 ms (typical)		
		VDE:	5 A @ 250 Vdc 30,000 ops (10 ops/minute) at 75 °C 5 A @ 30 Vdc 70,000 ops (10 ops/minute) at 75 °C		
Electrical Life (Resistive Load)		UL:	(10 ops/minute) át 75°C 5 A @ 250 Vac/30 Vdc 6000 ops 3 A @ 250 Vac/30 Vdc 100,000 ops		
Mechanical		20,000 (300 o),000 ops. at no load ps./minute)		
Intra-modul Field-to-Log	le Isolation,	3750 \			
Power-on Va		Yes, programmable			
Safe Value		Yes, programmable			

Model No.	Description			
OME-ET-7002	3-channel analog input and DIO module			
OME-PET-7002	3-channel analog input and DIO module with PoE			
RAIL-35-1	35 mm (1.4") DIN rail, 1 m (3.3') length			
iDRN-PS-1000	DIN rail power supply, 95 to 240 Vac input, 24 Vdc output at 850 mA			
OM-ESW-105	5-port unmanaged ethernet switch			
OM-ESW-105-POE	M-ESW-105-POE 5-port POE ethernet switch (four 10/100 base TX ports with POE and one 10/100 base TX uplink port)			

Comes complete with wall mount bracket, quick start guide, utility software and operator's manual on CD. Ordering Example: OME-ET-7002 3-channel analog input and DIO module and OCW-1 OMEGACARESM extends standard 1-year warranty to a total of 2 years.

7-Channel RTD Input Modules

OME-ET-7015/OME-PET-7015



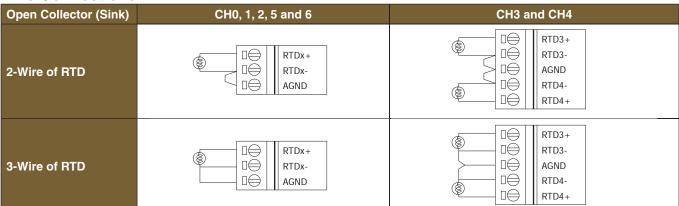
- Built-In Web Server
- 🛩 Web HMI
- ✓ Support for both MODBUS[®] TCP and MODBUS UDP Protocols
- Communication Security
- Dual Watchdog
- Wide Operating Temperature Range: -25 to 75°C (-13 to 167°F)
- I/O Pair Connection
- Built-In I/O
 - RTD Input: 7 Channels
- **Applications**
- Building Automation
- ✓ Factory Automation
- Machine Automation
- ✓ Remote Maintenance
- ✓ Remote Diagnosis
- Testing Equipment

The OME-ET-7015/OME-PET-7015 is a web-based ethernet I/O module that features a built-in web server which allows remote configuration, I/O monitoring and I/O control simply by using a regular web browser. Remote control is as easy as browsing the Internet. In addition, the web HMI function means that programming or HTML skills are no longer required so creating dynamic and attractive web pages for I/O monitoring and I/O control purposes is easy. The OME-ET-7015/ OME-PET-7015 offers easy and safe access for users at anytime and from any location, and also supports the MODBUS TCP protocol that ensures perfect integration with SCADA software. Furthermore, the OME-PET-7015 features "PoE", meaning that not only is data transmitted through an ethernet cable but also power making installation of the OME-PET-7015 easy. No more unnecessary wires with only an Ethernet cable being required to take care of everything in the field.

Wire Connections



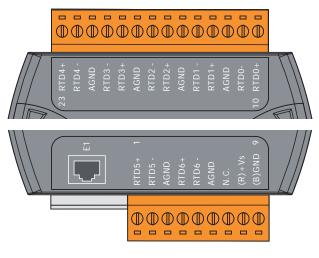
OME-ET-7015/OME-PET-7015 is specifically designed for long-distance RTD measurement. It features automatic compensation for three-wire RTD so that it can measure correctly regardless of the length of wires and provide open wire detection for RTD measurement. OME-ET-7015/OME-PET-7015 offers 7 channels, each of which could be connected with different kinds of RTD (Pt100, Pt1000, Ni120, Cu100, Cu1000). Also, OME-ET-7015/OME-PET-7015 is fully RoHS-compliant and has qualification for 4 kV ESD protection as well as 2500 Vdc intra-module isolation.



System Specifications

System Specifical				
Model No.	OME-ET-7015	OME-PET-7015		
Software				
Built-in Web Server	Yes			
Web HMI	Yes			
I/O Pair Connection	Ye	S		
Communication				
Ethernet Port	10/100 Base-TX MD			
PoE	—	Yes		
Protocol	MODBUS TCP,	MODBUS UDP		
Security	ID, password	and IP filter		
Dual Watchdog	Yes, module (communication (
LED Indicators				
L1 (System Running)	Ye	S		
L2 (Ethernet Link/Act)	Ye	s		
L3 (Ethernet 10/100 M Speed)	Yes			
PoE Power	_	Yes		
2-Way Isolation	<u>-</u>			
Ethernet	1500 Vdc	—		
I/O	2500 Vdc	2500 Vdc		
EMS Protection				
ESD (IEC 61000-4-2)	4 kV contact for e 8 kV air for ra			
EFT (IEC 61000-4-4)	±4 kV fo	r power		
Power Requirements				
Reverse Polarity Protection	Ye	S		
Powered from Terminal Block	Yes, 10 to 30 Vdc	Yes, 12 to 48 Vdc		
Powered from PoE	_	Yes, IEEE 802.3af, class1		
Consumption	2.0 W	2.6 W		
Mechanical				
Dimensions	72 x 123			
(W x L x D)	(2.8 x 4.84 x 1.37")			
Installation	DIN-rail or wall mounting			
Environment				
Operating Temperature	-25 to 75°C (-	13 to 167°F)		
Storage Temperature	-30 to 80°C (-	22 to 176°F)		
Humidity	10 to 90% RH, r	non-condensing		

Pin Assignments



I/O Specifications

RTD Input			
Channels	7 (differential)		
Sensor Type	Pt100, Pt1000, Ni120, Cu100, Cu1000		
Wire Connections	2/3 wire		
Individual Channel Configuration	Yes		
Resolution	16-bit		
Sampling Rate	12 samples/second (total)		
Accuracy	±0.05%		
Zero Drift	±0.5 μV/°C		
Span Drift	±20 μV/°C		
Common Mode Rejection	150 dB		
Normal Mode Rejection	100 dB		
Input Impedance	>1 MΩ		
Open Wire Detection	Yes		
3-wire RTD Lead Resistance Elimination	Yes		

To Order Visit omega.com/ome-et-7000_ome-pet-7000 for Pricing and Details

Model No.	Description
OME-ET-7015	7-channel RTD input module
OME-PET-7015	7-channel RTD input module with PoE
RAIL-35-1	35 mm (1.4") DIN rail, 1 m (3.3') length
iDRN-PS-1000	DIN rail power supply, 95 to 240 Vac input, 24 Vdc output at 850 mA
OM-ESW-105	5-port unmanaged ethernet switch
OM-ESW-105-POE	5-port POE ethernet switch (four 10/100 base TX ports with POE and one 10/100 base TX uplink port)

Comes complete with wall mount bracket, quick start guide, utility software and operator's manual on CD. Ordering Example: OME-ET-7015 7-channel analog input module and OCW-1 OMEGACARESM extends standard 1-year warranty to a total of 2 years.

8-Channel Analog Input and DO Modules

OME-ET-7017/OME-PET-7017



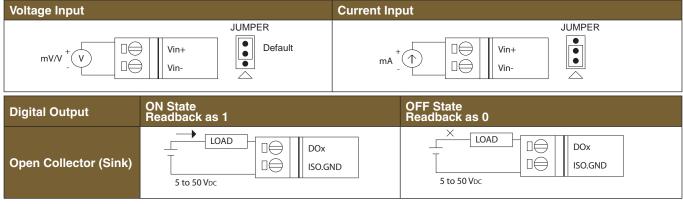
- Built-In Web Server
- 🛩 Web HMI
- Support for both MODBUS® TCP and MODBUS UDP Protocols
- Communication Security
- Dual Watchdog
- Wide Operating Temperature Range: -25 to 75°C (-13 to 162°F)
- ✓ I/O Pair Connection
- ✓ Built-In I/O
 - Al: 8 Channels with 240 Vrms Overvoltage Protection
 - DO: 4 Channels

Applications

- Building Automation
- Factory Automation
- Machine Automation
- Remote Maintenance
- Remote Diagnosis
- Testing Equipment

The OME-ET-7017/OME-PET-7017 is a web-based Ethernet I/O module that features a built-in web server which allows remote configuration, I/O monitoring and I/O control simply by using a regular web browser. Remote control is as easy as browsing the Internet. In addition, the web HMI function means that programming or HTML skills are no longer required so creating dynamic and attractive web pages for I/O monitoring and I/O control purposes is easy. The OME-ET-7017/ OME-PET-7017 offers easy and safe access for users at anytime and from any location, and also supports the MODBUS TCP protocol that ensures perfect integration with SCADA software. Furthermore, the OME-PET-7017 features "PoE", meaning that not only is data transmitted through an Ethernet cable but also power making installation of the OME-PET-7017 easy. No more unnecessary wires with only an Ethernet cable being required to take care of everything in the field.

Wire Connections



OME-ET-7017 Shown actual size.

Ou

Oa

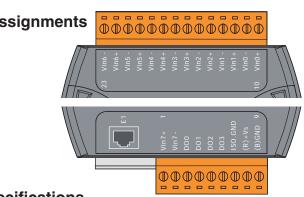
The OME-ET-7017/OME-PET-7017 is a 16-bit, 8-channel differential analog input and 4-channel digital ouput module that provides programmable input range on all analog channels (\pm 150 mV, \pm 500 mV, \pm 1 V, \pm 5 V, \pm 10 V, \pm 20 mA, 0 to 20 mA and 4 to 20 mA) and digital output can be set as alarm output with short-circuit protection and overload protection. Each analog channel is allowed to configure an individual range and has 240 Vrms high overvoltage protection. Modules are jumper selectable for voltage or current input. The sampling rate of OME-ET-7017/OME-PET-7017 is selectable; fast mode or normal mode. OME-ET-7017/OME-PET-7017 also has qualification for 4 kV ESD protection as well as 3000 Vdc intra-module isolation.

5000000

System Specifications

System Specificat			Pin As
Models	OME-ET-7017	OME-PET-7017	
Software			
Built-in Web Server	Ye		
Web HMI		es	
I/O Pair Connection	Ye	es	
Communication			
Ethernet Port		(with auto MDI/ N-X	
PoE		Yes	
Protocol		MODBUS UDP	
Security		and IP filter	I/O Spe
Dual Watchdog		0.8 seconds), (programmable)	Analog In Channels
LED Indicators			
L1 (System Running)		es	Туре
L2 (Ethernet Link/Act)	Ye	es	Individua
L3 (Ethernet 10/100 M Speed)	Yes		Configura
PoE Power	—	Yes	Resolutio
2-Way Isolation			
Ethernet	1500 Vdc	—	Sampling Rate
I/O	2500 Vdc	2500 Vdc	Rate
EMS Protection			Accuracy
ESD (IEC 61000-4-2)		r each terminal r random point	Zero Drift
EFT (IEC 61000-4-4)	±4 kV fo	or power	Span Drif
Power Requirements			Overvolta
Reverse Polarity Protection	Ye	es	Input Impedanc
Powered from Terminal Block	Yes, 10 to 30 Vdc	Yes, 12 to 48 Vdc	Common Normal M
Powered from PoE	_	Yes, IEEE 802.3af, class1	Digital Ou
Consumption	2.6 W	3.1 W	Channels
Mechanical	- 	• 	Type
Dimensions (W x L x D)	72 x 123 x 35 mm (2.83 x 4.84 x 1.38")		Sink/Sou Maximum
Installation	DIN-rail or wall mounting		Load Volt
Environment			Overvolta
Operating Temperature	-25 to 75°C (-13 to 167°F)	Overload Short-Cir
Storage Temperature	-30 to 80°C (-22 to 176°F)	Power-Or
111	101 000/ DU		0.4.14

DATA ACQUISITION SYSTEMS



I/O Specifications

ID, password	and IP filter	10 Specifications				
Yes, module (0.8 seconds),	Analog Input				
communication	(programmable)	Channels		8 (differential)		
	9S	Туре		±150 mV, ±500 mV, ±1V, ±5V, ±10V, ±20 mA, 0 to 20 mA, 4 to 20 mA (jumper selectable)		
	es	Individual Cl Configuratio		Yes		
_	Yes	Resolution	Normal Mode	16-bit		
		nesolution	Fast Mode	12-bit		
1500 Vdc		Sampling	Normal Mode	10 samples/second (total)		
2500 Vdc	2500 Vdc	Rate	Fast Mode	60 samples/second (total)		
		Accuracy	Normal Mode	±0.1%		
4 kV contact fo	r each terminal	Accuracy	Fast Mode	±0.5% or better		
and 8 kV air fo	r random point	Zero Drift		±20 μV/°C		
±4 kV fo	or power	Span Drift		±25 ppm/°C		
		Overvoltage Protection		240 Vrms		
V	es	Input Voltage		2 MΩ		
		Impedance	Current	125 Ω		
Yes,	Yes,	Common Mo	de Rejection	86 dB minimum		
10 to 30 Vdc	12 to 48 Vdc	Normal Mod	e Rejection	100 dB		
_	Yes, IEEE 802.3af, class1	Digital Output	ut			
2.6 W	3.1 W	Channels		4		
2.0 W	3.1 VV	Туре		Isolated open collector		
70 x 100	x 35 mm	Sink/Source (NPN/PNP)		Sink		
•	x 35 mm 34 x 1.38")	Maximum Lo	ad Current	700 mA/channel		
DIN-rail or wall mounting		Load Voltage		5 Vdc to 50 Vdc		
Birthanori	an mounting	Overvoltage	Protection	60 Vdc		
		Overload Protection		1.4 A		
-25 to 75°C (-13 to 167°F)		Short-Circui	t Protection	Yes		
-30 to 80°C (-22 to 176°F)	Power-On Va	lue	Yes, programmable		
10 to 90% RH,	non-condensing	Safe Value		Yes, programmable		

To Order Visit omega.com/ome-et-7000_ome-pet-7000 for Pricing and Details

Model No.	Description
OME-ET-7017	8-channel analog input and DO module
OME-PET-7017	8-channel analog input and DO module with PoE
RAIL-35-1	35 mm (1.4") DIN rail, 1 m (3.3') length
iDRN-PS-1000	DIN rail power supply, 95 to 240 Vac input, 24 Vdc output at 850 mA
OM-ESW-105	5-port unmanaged ethernet switch
OM-ESW-105-POE	5-port POE ethernet switch (four 10/100 base TX ports with POE and one 10/100 base TX uplink port)

Comes complete with wall mount bracket, quick start guide, utility software and operator's manual on CD. Ordering Example: OME-ET-7017 8-channel analog input and DO module and OCW-1 OMEGACARESM extends standard 1-year warranty to a total of 2 years.

Humidity

10 Differential/20 Single-Ended Channel Analog Input Modules

OME-ET-7017-10/OME-PET-7017-10



- Built-In Web Server
- 🛩 Web HMI
- Support for Both MODBUS® TCP and MODBUS UDP Protocols
- Communication Security
- Dual Watchdog
- Wide Operating Temperature Range -25 to 75°C (-13 to 167°F)
- I/O Pair Connection
- Built-In I/O
 - AI: 10 Differential/20 Single-Ended Channels with 240 Vms Overvoltage Protection

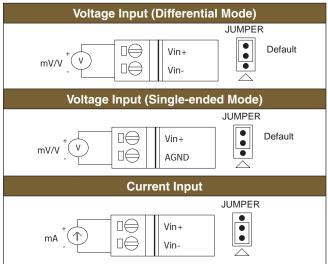
Applications

- Building Automation
- Factory Automation
- Machine Automation
- Remote Maintenance
- Remote Diagnosis
- Testing Equipment

The OME-ET-7017-10/OME-PET-7017-10 is a webbased Ethernet I/O module that features a built-in web server which allows remote configuration, I/O monitoring and I/O control simply by using a regular web browser. Remote control is as easy as browsing the Internet. In addition, the web HMI function means that programming or HTML skills are no longer required so creating dynamic and attractive web pages for I/O monitoring and I/O control purposes is easy. The OME-ET-7017-10/OME-PET-7017-10 offers easy and safe access for users at anytime and from any location, and also supports the MODBUS TCP protocol that ensures perfect integration with SCADA software. Furthermore, the OME-PET-7017-10 features "PoE", meaning that not only is data transmitted through an Ethernet cable but also power making installation of the OME-PET-7017-10 easy. No more unnecessary wires with only an Ethernet cable being required to take care of everything in the field. The OME-ET-7017-10 is a 16-bit, 10-channel differential or 20-channel single-ended analog input module that provides programmable input range on all analog channels (\pm 150 mV, \pm 500 mV, \pm 1 V, \pm 5 V, \pm 10 V, \pm 20 mA, 0 to 20 mA and 4 to 20 mA). Each analog channel is allowed to configure an individual range and has 240 Vrms high overvoltage protection. Modules are jumper selectable for voltage or current input. The sampling rate of OME-ET-7017/ OME-PET-7017 is selectable; fast mode or normal mode. OME-ET-7017/OME-PET-7017 also has gualification for 4 kV ESD protection as well as 3000 Vdc intra-module isolation.



Wire Connections

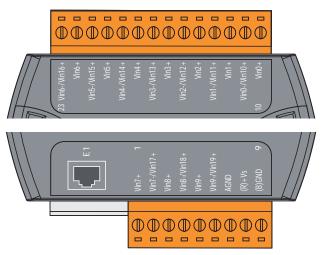


<u>,</u> | =

System Specifications			
Models	OME-ET-7017-10	OME-PET-7017-10	
Software			
Built-in Web Server	Y	Yes	
Web HMI	Yes		
I/O Pair Connection	Y	Yes	
Communication			
Ethernet Port	10/100 Base-TX v	vith Auto MDI/MDI-X	
PoE	_	Yes	
Protocol	MODBUS® TCI	P, MODBUS UDP	
Security	ID, passwor	rd and IP filter	
Dual Watchdog		(0.8 seconds),	
	communication	n (programmable)	
LED Indicators			
L1 (System Running)		Yes	
L2 (Ethernet Link/Act)	Y	Yes	
L3 (Ethernet 10/100 M Speed)	Y	Yes	
PoE Power		Yes	
2-Way Isolation		163	
Ethernet	1500 Vdc		
I/O	2500 Vdc	 2500 Vdc	
EMS Protection	2500 Vuc	2300 Vuc	
ESD (IEC 61000-4-2)	4 kV contact for each terminal and 8 kV		
		ndom point	
EFT (IEC 61000-4-4) Power Requirements		for power	
	Yes		
Reverse Polarity Protection		Yes	
Reverse Polarity		Yes Yes, 12 to 48 Vdc	
Reverse Polarity Protection Powered from	Y		
Reverse Polarity Protection Powered from Terminal Block Powered from PoE	Y	Yes, 12 to 48 Vdc Yes, IEEE 802.3af,	
Reverse Polarity Protection Powered from Terminal Block	Yes, 10 to 30 Vdc —	Yes, 12 to 48 Vdc Yes, IEEE 802.3af, class1	
Reverse Polarity Protection Powered from Terminal Block Powered from PoE Consumption Mechanical Dimensions	Yes, 10 to 30 Vdc — 2.6 W	Yes, 12 to 48 Vdc Yes, IEEE 802.3af, class1	
Reverse Polarity Protection Powered from Terminal Block Powered from PoE Consumption Mechanical	Yes, 10 to 30 Vdc — 2.6 W 72 x 123 x 35 mm	Yes, 12 to 48 Vdc Yes, IEEE 802.3af, class1 3.8 W (2.83 x 4.84 x 1.38")	
Reverse Polarity Protection Powered from Terminal Block Powered from PoE Consumption Mechanical Dimensions (W x L x D)	Yes, 10 to 30 Vdc — 2.6 W 72 x 123 x 35 mm	Yes, 12 to 48 Vdc Yes, IEEE 802.3af, class1 3.8 W	
Reverse Polarity Protection Powered from Terminal Block Powered from PoE Consumption Mechanical Dimensions (W x L x D) Installation Environment Operating	Yes, 10 to 30 Vdc — 2.6 W 72 x 123 x 35 mm DIN-rail or v	Yes, 12 to 48 Vdc Yes, IEEE 802.3af, class1 3.8 W (2.83 x 4.84 x 1.38")	
Reverse Polarity ProtectionPowered from Terminal BlockPowered from PoEConsumptionMechanicalDimensions (W x L x D)InstallationEnvironmentOperating TemperatureStorage	Yes, 10 to 30 Vdc — 2.6 W 72 x 123 x 35 mm DIN-rail or v -25 t	Yes, 12 to 48 Vdc Yes, IEEE 802.3af, class1 3.8 W (2.83 x 4.84 x 1.38") wall mounting	
Reverse Polarity ProtectionPowered from Terminal BlockPowered from PoEConsumptionMechanicalDimensions (W x L x D)InstallationEnvironmentOperating TemperatureStorage Temperature	Yes, 10 to 30 Vdc — 2.6 W 72 x 123 x 35 mm DIN-rail or v -25 t -30 t	Yes, 12 to 48 Vdc Yes, IEEE 802.3af, class1 3.8 W (2.83 x 4.84 x 1.38") wall mounting o 75°C o 80°C	
Reverse Polarity ProtectionPowered from Terminal BlockPowered from PoEConsumptionMechanicalDimensions (W x L x D)InstallationEnvironmentOperating TemperatureStorage TemperatureHumidity	Yes, 10 to 30 Vdc — 2.6 W 72 x 123 x 35 mm DIN-rail or v -25 t -30 t	Yes, 12 to 48 Vdc Yes, IEEE 802.3af, class1 3.8 W (2.83 x 4.84 x 1.38") wall mounting o 75°C	

DATA ACQUISITION SYSTEMS

Pin Assignments



I/O Specifications

Analog Input		
Channels		10 differential or 20 single- ended*, software selectable
Туре		±150 mV, ±500 mV, ±1V, ±5V, ±10V, ±20 mA, 0 to 20 mA, 4 to 20 mA (Jumper Selectable)
Individual Ch Configuration		Yes
Resolution	Normal Mode	16-bit
	Fast Mode	12-bit
Sampling Rate	Normal Mode	10 samples/second (total)
nale	Fast Mode	60 samples/second (total)
Accuracy	Normal Mode	±0.1%
	Fast Mode	±0.5% or better
Zero Drift		±20 μV/°C
Span Drift		±25 ppm/°C
Overveltege	Differential	240 Vrms
Overvoltage Protection Ended		150 Vrms
Input Impedance	Voltage	2 MΩ (differential), 1 MΩ (single-ended)
	Current	125 Ω
Common Mo	de Rejection	86 dB minimum
Normal Mode	Rejection	100 dB

· · · · ·		
Model No.	Description	
OME-ET-7017-10	10 differential/20 single-ended channel analog input module	
OME-PET-7017-10	10 differential/20 single-ended channel analog input module with PoE	
RAIL-35-1	35 mm (1.4") DIN rail, 1 m (3.3') length	
iDRN-PS-1000	DIN rail power supply, 95 to 240 Vac input, 24 Vdc output at 850 mA	
OM-ESW-105	5-port unmanaged ethernet switch	
OM-ESW-105-POE	5-port POE ethernet switch (four 10/100 base TX ports with POE and one 10/100 base TX uplink port)	

* Differential mode can be used for voltage input and current input. Single-ended mode can be used for voltage input only. Comes complete with wall mount bracket, quick start guide, utility software and operator's manual on CD.

Ordering Example: OME-ET-7017-10 10 differential/20 single-ended channel analog input module and OCW-1 OMEGACARESM extends standard 1-year warranty to a total of 2 years.

10-Channel Thermocouple Input Modules with OME-DB-1820 Daughter Board

OME-ET-7018Z/OME-PET-7018Z

- Built-In Web Server
- 🛩 Web HMI
- Support for Both MODBUS® TCP and MODBUS UDP Protocols
- Communication Security
- Dual Watchdog
- Wide Operating Temperature Range: -25 to 75°C (-13 to 167°F)
- I/O Pair Connection
- Built-In I/O
 - Thermocouple Input: 10 Channels
 - DO: 6 Channels

Applications

- Building Automation
- ✓ Factory Automation
- Machine Automation
- Remote Maintenance
- Remote Diagnosis
- Testing Equipment



The OME-ET-7018Z/OME-PET-7018Z is a web-based Ethernet I/O module that features a built-in web server which allows remote configuration, I/O monitoring and I/O control simply by using a regular web browser. Remote control is as easy as browsing the Internet. In addition, the web HMI function means that programming or HTML skills are no longer required so creating dynamic and attractive web pages for I/O monitoring and I/O control purposes is easy. The OME-ET-7018Z/ OME-PET-7018Z offers easy and safe access for users at anytime and from any location, and also supports the MODBUS TCP protocol that ensures perfect integration with SCADA software. Furthermore, the OME-PET-7018Z features "PoE", meaning that not only is data transmitted through an Ethernet cable but also power making installation of the OME-PET-7018Z easy. No more unnecessary wires with only an Ethernet cable being required to take care of everything in the field.

The OME-ET-7018Z/OME-PET-7018Z is specifically designed for extremely accurate thermocouple measurement and features automatic cold-junction compensation for each channel to ensure temperature output consistency and stable temperature output in the field. Current input and voltage input are both supported. Another feature is that the ten input channels can be individually configured for different kinds of analog input. Open thermocouple detection and ESD/EFT/Surge protection mechanisms are also included. The six digital output channels can be set as alarm outputs with short-circuit protection and overload protection.



System Specifications

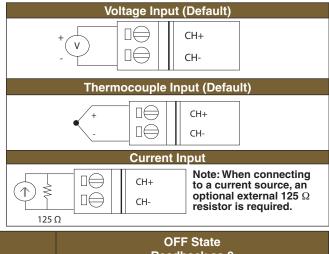
NEW

Model No.	OME-ET-7018Z	OME-PET-7018Z
Software		
Built-in Web	,	/
Server	Yes	
Web HMI	Yes	
I/O Pair		
Connection	Y	/es
Communication		
Ethernet Port	10/100 Base-TX w	vith Auto MDI/MDI-X
PoE		Yes
Protocol	MODBUS® TCF	, MODBUS UDP
Security		d and IP filter
		(0.8 seconds),
Dual Watchdog		(programmable)
LED Indicators		
L1 (System		/
Running)	Y	/es
L2 (Ethernet		,
Link/Act)) Y	/es
L3 (Ethernet		
10/100 M Speed)) Y	/es
PoE Power		Yes
2-Way Isolation		
Ethernet	1500 Vdc	
I/O	2500 Vdc	2500 Vdc
EMS Protection	2000 100	2000 100
ESD	4 kV contact for each terminal and	
	8 kV air for random point	
(IEC 61000-4-2)	8 kV air for	random point
(IEC 61000-4-2) EFT		
EFT		random point or Power
EFT (IEC 61000-4-4)	±4 kV f	
EFT (IEC 61000-4-4) Power Requireme	±4 kV f nts	or Power
EFT (IEC 61000-4-4) Power Requireme Reverse Polarity	±4 kV f nts	
EFT (IEC 61000-4-4) Power Requireme Reverse Polarity Protection	±4 kV f nts Y	or Power /es
EFT (IEC 61000-4-4) Power Requireme Reverse Polarity Protection Powered from	±4 kV f nts	or Power
EFT (IEC 61000-4-4) Power Requireme Reverse Polarity Protection	±4 kV f nts Y	or Power Yes Yes, 12 to 48 Vdc
EFT (IEC 61000-4-4) Power Requireme Reverse Polarity Protection Powered from Terminal Block Powered	±4 kV f nts Y	or Power /es Yes, 12 to 48 Vdc Yes, IEEE 802.3af,
EFT (IEC 61000-4-4) Power Requireme Reverse Polarity Protection Powered from Terminal Block Powered from PoE	±4 kV f nts Y	or Power Yes Yes, 12 to 48 Vdc
EFT (IEC 61000-4-4) Power Requireme Reverse Polarity Protection Powered from Terminal Block Powered	±4 kV f nts Yes, 10 to 30 Vdc —	or Power /es Yes, 12 to 48 Vdc Yes, IEEE 802.3af, class1
EFT (IEC 61000-4-4) Power Requireme Reverse Polarity Protection Powered from Terminal Block Powered from PoE Consumption	±4 kV f nts Yes, 10 to 30 Vdc — 2.0 W	or Power Yes, 12 to 48 Vdc Yes, IEEE 802.3af, class1 3.0 W
EFT (IEC 61000-4-4) Power Requireme Reverse Polarity Protection Powered from Terminal Block Powered from PoE Consumption Mechanical Dimensions	±4 kV f nts Yes, 10 to 30 Vdc — 2.0 W	or Power /es Yes, 12 to 48 Vdc Yes, IEEE 802.3af, class1
EFT (IEC 61000-4-4) Power Requireme Reverse Polarity Protection Powered from Terminal Block Powered from PoE Consumption Mechanical Dimensions (W x L x D)	±4 kV f nts Yes, 10 to 30 Vdc 	or Power /es Yes, 12 to 48 Vdc Yes, IEEE 802.3af, class1 3.0 W (2.83 x 4.5 x 1.37")
EFT (IEC 61000-4-4) Power Requireme Reverse Polarity Protection Powered from Terminal Block Powered from PoE Consumption Mechanical Dimensions (W x L x D) Installation	±4 kV f nts Yes, 10 to 30 Vdc 	or Power Yes, 12 to 48 Vdc Yes, IEEE 802.3af, class1 3.0 W
EFT (IEC 61000-4-4) Power Requireme Reverse Polarity Protection Powered from Terminal Block Powered from PoE Consumption Mechanical Dimensions (W x L x D) Installation Environment	±4 kV f nts Yes, 10 to 30 Vdc 	or Power /es Yes, 12 to 48 Vdc Yes, IEEE 802.3af, class1 3.0 W (2.83 x 4.5 x 1.37") wall mounting
EFT (IEC 61000-4-4) Power Requireme Reverse Polarity Protection Powered from Terminal Block Powered from PoE Consumption Mechanical Dimensions (W x L x D) Installation Environment Operating	±4 kV f nts Yes, 10 to 30 Vdc 	or Power /es Yes, 12 to 48 Vdc Yes, IEEE 802.3af, class1 3.0 W (2.83 x 4.5 x 1.37")
EFT (IEC 61000-4-4) Power Requireme Reverse Polarity Protection Powered from Terminal Block Powered from PoE Consumption Mechanical Dimensions (W x L x D) Installation Environment Operating Temperature	±4 kV f nts Yes, 10 to 30 Vdc 	or Power 'es Yes, 12 to 48 Vdc Yes, IEEE 802.3af, class1 3.0 W (2.83 x 4.5 x 1.37") wall mounting (-13 to 167°F)
EFT (IEC 61000-4-4) Power Requireme Reverse Polarity Protection Powered from Terminal Block Powered from PoE Consumption Mechanical Dimensions (W x L x D) Installation Environment Operating Temperature Storage	±4 kV f nts Yes, 10 to 30 Vdc 	or Power /es Yes, 12 to 48 Vdc Yes, IEEE 802.3af, class1 3.0 W (2.83 x 4.5 x 1.37") wall mounting
EFT (IEC 61000-4-4) Power Requireme Reverse Polarity Protection Powered from Terminal Block Powered from PoE Consumption Mechanical Dimensions (W x L x D) Installation Environment Operating Temperature Storage Temperature	±4 kV f nts Yes, 10 to 30 Vdc — 2.0 W 72 x 116 x 35 mm DIN-rail or v -25 to 75°C -30 to 80°C	or Power /es Yes, 12 to 48 Vdc Yes, IEEE 802.3af, class1 3.0 W (2.83 x 4.5 x 1.37") wall mounting (-13 to 167°F) (-22 to 176°F)
EFT (IEC 61000-4-4) Power Requireme Reverse Polarity Protection Powered from Terminal Block Powered from PoE Consumption Mechanical Dimensions (W x L x D) Installation Environment Operating Temperature Storage	±4 kV f nts Yes, 10 to 30 Vdc — 2.0 W 72 x 116 x 35 mm DIN-rail or v -25 to 75°C -30 to 80°C	or Power 'es Yes, 12 to 48 Vdc Yes, IEEE 802.3af, class1 3.0 W (2.83 x 4.5 x 1.37") wall mounting (-13 to 167°F)

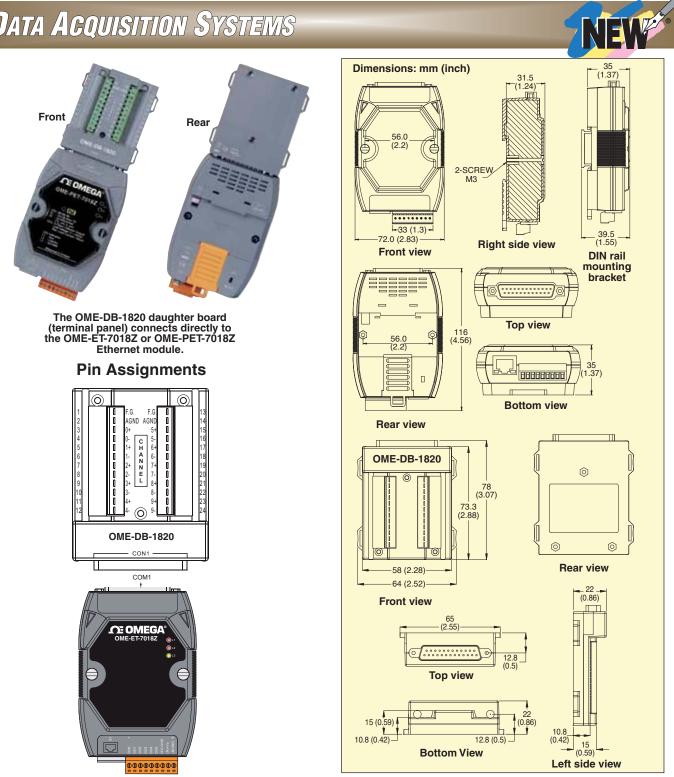
I/O Specifications

Thermocouple Input		
Channels	10 (differential)	
	±15 mV, ±50 mV, ±100 mV,	
	±500 mV, ±1 V, ±2.5 V	
	±20 mA, 0 to 20 mA, 4 to	
Sensor Type	20 mA (Requires Optional	
	External 125 Ω Resistor)	
	Thermocouple (J, K, T, E,	
	R, S, B, N, C, L, M, and	
	LDIN43710)	
Individual Channel	Yes	
Configuration		
Resolution	16-bit	
Sampling Rate	10 samples/second (total)	
Accuracy	±0.1% of FSR or better	
Zero Drift	±0.5 μV/°C	
Span Drift	±25 ppm/°C	
Over Voltage Protection 240 Vrms		
Input Impedance >300 kΩ		
Common Mode Rejection	150 dB minimum	
Normal Mode Rejection	100 dB	
Temperature Output	Yes	
Consistency	les	
Stable Temperature	Yes	
Output in the Field		
Open Wire Detection	Yes	
Digital Output		
Channels	6	
Туре	Isolated open collector	
Sink/Source (NPN/PNP)	Sink	
Max. Load Current 700 mA/channel		
Load Voltage 5 to 50 Vdc		
Overvoltage Protection	60 Vdc	
Overload Protection	1.4 A	
Short-circuit Protection	Yes	
Power-on Value	Yes, programmable	
Safe Value	Yes, programmable	

Wire Connections



Digital Output	ON State Readback as 1	OFF State Readback as 0
Open Collector (Sink)	LOAD LOAD LOAD DOx ISO.GND	LOAD LOAD DOX ISO.GND S to 50 Vdc



To Order Visit omega.com/ome-et-7000_ome-pet-7000 for Pricing and Details		
Model No.	Description	
OME-ET-7018Z	10-channel thermocouple input module with OME-DB-1820 daughter board	
OME-PET-7018Z	10-channel thermocouple input module with OME-DB-1820 daughter board with PoE	
RAIL-35-1	35 mm (1.4") DIN rail, 1 m (3.3') length	
iDRN-PS-1000	DIN rail power supply, 95 to 240 Vac input, 24 Vdc output at 850 mA	
OM-ESW-105	5-port unmanaged ethernet switch	
OM-ESW-105-POE	5-port POE ethernet switch (four 10/100 base TX ports with POE and one 10/100 base TX uplink port)	

Comes complete with wall mount bracket, quick start guide, utility software and operator's manual on CD. **Ordering Example: OME-ET-7018Z** 10-channel thermocouple input module with **OME-DB-1820** daughter board and **OCW-1** OMEGACARESM extends standard 1-year warranty to a total of 2 years.



10-Channel Thermocouple Input Modules with OME-DB-1820 Daughter Board

OME-ET-7019Z/OME-PET-7019Z



- Built-In Web Server
- 🛩 Web HMI
- ✓ Support for both MODBUS[®] TCP and MODBUS UDP Protocols
- Communication Security
- Dual Watchdog
- Wide Operating Temperature Range: -25 to 75°C (-13 to 167°F)
- I/O Pair Connection
- ✓ Built-In I/O
 - Al: 10 Channels with 240 Vrms Overvoltage Protection
 - DO: 6 Channels

Applications

- Building Automation
- Factory Automation
- Machine Automation
- Remote Maintenance
- Remote Diagnosis
- Testing Equipment



The OME-ET-7019Z/OME-PET-7019Z is a web-based Ethernet I/O module that features a built-in web server which allows remote configuration, I/O monitoring and I/O control simply by using a regular web browser. Remote control is as easy as browsing the Internet. In addition, the web HMI function means that programming or HTML skills are no longer required so creating dynamic and attractive web pages for I/O monitoring and I/O control purposes is easy. The OME-ET-7019Z/ OME-PET-7019Z offers easy and safe access for users at anytime and from any location, and also supports the MODBUS TCP protocol that ensures perfect integration with SCADA software. Furthermore, the OME-PET-7019Z features "PoE", meaning that not only is data transmitted through an Ethernet cable but also power making installation of the OME-PET-7019Z easv. No more unnecessary wires with only an Ethernet cable being required to take care of everything in the field.

The OME-ET-7019Z/OME-PET-7019Z is specifically designed for extremely accurate thermocouple measurement and features automatic cold-junction compensation for each channel to ensure temperature output consistency and stable temperature output in the field. Current input and voltage input are both supported. Another feature is that the ten input channels can be individually be configured for different kinds of analog input. Open thermocouple detection and ESD/EFT/Surge protection mechanisms are also included. The six digital output channels can be set as alarm outputs with short-circuit protection and overload protection.



System Specifications

System Specificat		
Models	OME-ET-7019Z	OME-PET-7019Z
Software		
Built-in Web Server	Yes	
Web HMI	Yes	
I/O Pair Connection	Y	és
Communication		
Ethernet Port	10/100 Ba	se-TX with
Ethemet Port	Auto MI	DI/MDI-X
PoE	—	Yes
Protocol	MODBUS TCP,	MODBUS UDP
Security	ID, Password	d and IP Filter
		nodule
Dual Watchdog		communication
	(progra	mmable)
LED Indicators		
L1 (System Running)	Y	es
L2 (Ethernet Link/Act)	Y	es
L3 (Ethernet 10/100 M	v	és
Speed)	I'	
PoE Power	—	Yes
2-Way Isolation		
Ethernet	1500 Vdc	—
I/O	2500 Vdc	2500 Vdc
EMS Protection		
ESD (IEC 61000-4-2)	4 kV contact for each terminal	
		or random point
EFT (IEC 61000-4-4)		or power
Surge (IEC 61000-4-5)	±3 kV fo	or power
Power Requirements		
Reverse Polarity	Y	és
Protection		
Powered from	Yes,	Yes,
Terminal Block	10 to 30 Vdc	12 to 48 Vdc
Powered from PoE	_	Yes, IEEE
	0.5.11	802.3af, Class1
Consumption	2.5 W	3.5 W
Mechanical	70 110	
Dimensions	-	5 x 35 mm
(W x L x D)	(2.83 x 4.56 x 1.37")	
Installation	DIN-rail or v	vall mounting
Environment		
Operating	-25 to 75°C (-13 to 167°F)	
Temperature		
Storage Temperature		(-22 to 176°F)
Humidity	10 to 90% RH, non-condensing	

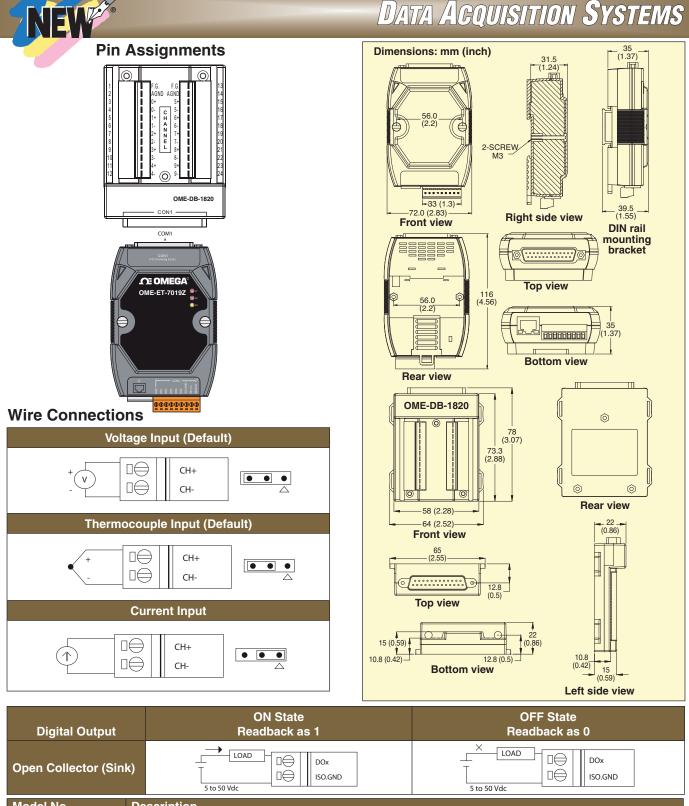
The OME-DB-1820 daughter board (terminal panel) connects directly to the OME-ET-7019Z or OME-PET-7019Z Ethernet module.

I/O Specifications

Channels10 (differential)±15 mV, ±50 mV, ±100 mV, ±150 mV, ±500 mV, ±1 V, ±2.5 V, ±5 V, ±10 V,±15 mV, ±50 mV, ±10 v, ±2.5 V, ±5 V, ±10 V,±2.5 V, ±5 V, ±10 V, ±2.0 mA, 0 to 20 mA, 4 to 20 mA (jumper selectable)Individual Channel ConfigurationResolutionResolutionResolution10 samples/second (total)Accuracy±0.1% of FSR or betterZero Drift±0.5 μV/°CSpan Drift±25 ppm/°COver Voltage Protection1nput Impedance>300 kΩCommon Mode RejectionNormal Mode RejectionNormal Mode RejectionNormal Mode RejectionYesStable TemperatureYesOutput in the FieldOpen Wire DetectionYesDigital OutputChannels6TypeIsolated open collectorSink/Source (NPN/PNP)SinkMaximum Load CurrentLoad Voltage5 to 50 VdcOvervoltage Protection1.4 AShort-Circuit ProtectionYes, programmablo	Analog Input		
Sensor Type±150 mV, ±500 mV, ±1 V, ±2.5 V, ±5 V, ±10 V,Sensor Type±20 mA, 0 to 20 mA, 4 to 20 mA (jumper selectable)Individual Channel ConfigurationYesResolution16-bitSampling Rate10 samples/second (total)Accuracy±0.1% of FSR or betterZero Drift±25 ppm/°CSpan Drift±25 ppm/°COver Voltage Protection240 VrmsInput Impedance>300 kQCommon Mode Rejection86 dB minimumNormal Mode RejectionYesStable Temperature Output ConsistencyYesOpen Wire DetectionYesDigital Output Channels6TypeIsolated open collectorSink/Source (NPN/PNP) Maximum Load CurrentSinkMaximum Load Current Load Voltage700 mA/channelLoad Voltage5 to 50 VdcOvervoltage Protection1.4 AShort-Circuit ProtectionYesPower-On ValueYes, programmable	Channels	10 (differential)	
Sensor Type±2.5 V, ±5 V, ±10 V, ±20 mA, 0 to 20 mA, 4 to 20 mA (jumper selectable)Individual Channel ConfigurationYesResolution16-bitSampling Rate10 samples/second (total)Accuracy±0.1% of FSR or betterZero Drift±25 ppm/°COver Voltage Protection240 VrmsInput Impedance>300 kΩConsistencyYesStable Temperature Output Copen Wire DetectionYesOpen Wire DetectionYesDigital OutputYesChannels6TypeIsolated open collectorSink/Source (NPN/PNP)SinkMaximum Load Current Load Voltage Protection5 to 50 VdcOvervoltage Protection60 VdcOvervoltage ProtectionYesDigital Output Channels6TypeIsolated open collectorSink/Source (NPN/PNP)SinkMaximum Load Current Load Voltage5 to 50 VdcOvervoltage Protection1.4 AShort-Circuit ProtectionYes, programmable			
Sensor Type±20 mA, 0 to 20 mA, 4 to 20 mA (jumper selectable)Thermocouple (J, K, T, E, R, S, B, N, C, L, M, and LDIN43710)Individual Channel ConfigurationYesResolution16-bitSampling Rate10 samples/second (total)Accuracy±0.1% of FSR or betterZero Drift±25 ppm/°COver Voltage Protection240 VrmsInput Impedance>300 kΩCommon Mode Rejection86 dB minimumNormal Mode RejectionYesStable Temperature Output ChannelsYesOpen Wire DetectionYesDigital Output Channels6TypeIsolated open collectorSink/Source (NPN/PNP)SinkMaximum Load Current Load Voltage5 to 50 VdcOvervoltage Protection1.4 AShort-Circuit ProtectionYesPower-On ValueYes, programmable		±150 mV, ±500 mV, ±1 V,	
Sensor Type20 mA (jumper selectable) Thermocouple (J, K, T, E, R, S, B, N, C, L, M, and LDIN43710)Individual Channel ConfigurationYesResolution16-bitSampling Rate10 samples/second (total) ±0.1% of FSR or betterAccuracy±0.1% of FSR or betterZero Drift±25 ppm/°COver Voltage Protection240 VrmsInput Impedance>300 kΩCommon Mode Rejection86 dB minimumNormal Mode Rejection100 dBTemperature Output ConsistencyYesOpen Wire DetectionYesDigital Output6TypeIsolated open collectorSink/Source (NPN/PNP)SinkMaximum Load Current700 mA/channelLoad Voltage5 to 50 VdcOvervoltage Protection1.4 AShort-Circuit ProtectionYesPower-On ValueYes, programmable		±2.5 V, ±5 V, ±10 V,	
20 mA (timper selectable) Thermocouple (J, K, T, E, R, S, B, N, C, L, M, and LDIN43710) Individual Channel Configuration Yes Resolution 16-bit Sampling Rate 10 samples/second (total) Accuracy ±0.1% of FSR or better Zero Drift ±0.5 µV/°C Span Drift ±25 ppm/°C Over Voltage Protection 240 Vrms Input Impedance >300 kΩ Common Mode Rejection 86 dB minimum Normal Mode Rejection 100 dB Temperature Output Yes Stable Temperature Yes Open Wire Detection Yes Digital Output Gamma Channels 6 Type Isolated open collector Sink/Source (NPN/PNP) Sink Maximum Load Current 700 mA/channel Load Voltage 5 to 50 Vdc Overvoltage Protection 60 Vdc Overload Protection<	Soncor Tuno	±20 mA, 0 to 20 mA, 4 to	
R, S, B, N, C, L, M, and LDIN43710)Individual Channel ConfigurationYesResolution16-bitSampling Rate10 samples/second (total)Accuracy±0.1% of FSR or betterZero Drift±0.5 µV/°CSpan Drift±25 ppm/°COver Voltage Protection240 VrmsInput Impedance>300 kΩCommon Mode Rejection86 dB minimumNormal Mode Rejection100 dBTemperature Output ConsistencyYesStable Temperature Output in the FieldYesOpen Wire DetectionYesDigital Output Channels6TypeIsolated open collectorSink/Source (NPN/PNP)SinkMaximum Load Current Covervoltage Protection700 mA/channelLoad Voltage5 to 50 VdcOverload Protection1.4 AShort-Circuit ProtectionYesPower-On ValueYes, programmable	Sensor Type	20 mA (jumper selectable)	
LDIN43710)Individual Channel ConfigurationYesResolution16-bitSampling Rate10 samples/second (total)Accuracy±0.1% of FSR or betterZero Drift±0.5 μV/°CSpan Drift±25 ppm/°COver Voltage Protection240 VrmsInput Impedance>300 kΩCommon Mode Rejection86 dB minimumNormal Mode Rejection100 dBTemperature Output ConsistencyYesStable Temperature Output in the FieldYesOpen Wire DetectionYesDigital OutputSinkChannels6TypeIsolated open collectorSink/Source (NPN/PNP)SinkMaximum Load Current700 mA/channelLoad Voltage5 to 50 VdcOvervoltage Protection1.4 AShort-Circuit ProtectionYesPower-On ValueYes, programmable		Thermocouple (J, K, T, E,	
Individual Channel ConfigurationYesResolution16-bitSampling Rate10 samples/second (total)Accuracy±0.1% of FSR or betterZero Drift±0.5 μV/°CSpan Drift±25 ppm/°COver Voltage Protection240 VrmsInput Impedance>300 kΩCommon Mode Rejection86 dB minimumNormal Mode Rejection100 dBTemperature Output ConsistencyYesStable Temperature Output in the FieldYesOpen Wire DetectionYesDigital OutputSinkChannels6TypeIsolated open collectorSink/Source (NPN/PNP)SinkMaximum Load Current700 mA/channelLoad Voltage5 to 50 VdcOvervoltage Protection1.4 AShort-Circuit ProtectionYesPower-On ValueYes, programmable		R, S, B, N, C, L, M, and	
ConfigurationYesResolution16-bitSampling Rate10 samples/second (total)Accuracy±0.1% of FSR or betterZero Drift±0.5 μV/°CSpan Drift±25 ppm/°COver Voltage Protection240 VrmsInput Impedance>300 kΩCommon Mode Rejection86 dB minimumNormal Mode Rejection100 dBTemperature OutputYesStable TemperatureYesOutput in the FieldYesOpen Wire DetectionYesDigital OutputChannelsChannels6TypeIsolated open collectorSink/Source (NPN/PNP)SinkMaximum Load Current700 mA/channelLoad Voltage5 to 50 VdcOvervoltage Protection1.4 AShort-Circuit ProtectionYesPower-On ValueYes, programmable		LDIN43710)	
Configuration16-bitResolution16-bitSampling Rate10 samples/second (total)Accuracy±0.1% of FSR or betterZero Drift±0.5 μV/°CSpan Drift±25 ppm/°COver Voltage Protection240 VrmsInput Impedance>300 kΩCommon Mode Rejection86 dB minimumNormal Mode Rejection100 dBTemperature OutputYesConsistencyYesStable TemperatureYesOutput in the FieldYesDigital Output6TypeIsolated open collectorSink/Source (NPN/PNP)SinkMaximum Load Current700 mA/channelLoad Voltage5 to 50 VdcOvervoltage Protection1.4 AShort-Circuit ProtectionYes, programmable		Ves	
Sampling Rate10 samples/second (total)Accuracy±0.1% of FSR or betterZero Drift±0.5 μV/°CSpan Drift±25 ppm/°COver Voltage Protection240 VrmsInput Impedance>300 kΩCommon Mode Rejection86 dB minimumNormal Mode Rejection100 dBTemperature Output ConsistencyYesStable Temperature Output in the FieldYesOpen Wire DetectionYesDigital OutputChannelsChannels6TypeIsolated open collectorSink/Source (NPN/PNP)SinkMaximum Load Current700 mA/channelLoad Voltage5 to 50 VdcOvervoltage Protection1.4 AShort-Circuit ProtectionYesPower-On ValueYes, programmable			
Accuracy±0.1% of FSR or betterZero Drift±0.5 μV/°CSpan Drift±25 ppm/°COver Voltage Protection240 VrmsInput Impedance>300 kΩCommon Mode Rejection86 dB minimumNormal Mode Rejection100 dBTemperature OutputYesConsistencyYesStable TemperatureYesOutput in the FieldYesOpen Wire DetectionYesDigital Output6TypeIsolated open collectorSink/Source (NPN/PNP)SinkMaximum Load Current700 mA/channelLoad Voltage5 to 50 VdcOvervoltage Protection1.4 AShort-Circuit ProtectionYesPower-On ValueYes, programmable			
Zero Drift±0.5 μV/°CSpan Drift±25 ppm/°COver Voltage Protection240 VrmsInput Impedance>300 kΩCommon Mode Rejection86 dB minimumNormal Mode Rejection100 dBTemperature OutputYesConsistencyYesStable TemperatureYesOutput in the FieldYesDigital Output6TypeIsolated open collectorSink/Source (NPN/PNP)SinkMaximum Load Current700 mA/channelLoad Voltage5 to 50 VdcOvervoltage Protection1.4 AShort-Circuit ProtectionYesPower-On ValueYes, programmable	Sampling Rate		
Span Drift ±25 ppm/°C Over Voltage Protection 240 Vrms Input Impedance >300 kΩ Common Mode Rejection 86 dB minimum Normal Mode Rejection 100 dB Temperature Output Yes Consistency Yes Stable Temperature Yes Output in the Field Yes Digital Output Channels Channels 6 Type Isolated open collector Sink/Source (NPN/PNP) Sink Maximum Load Current 700 mA/channel Load Voltage 5 to 50 Vdc Overvoltage Protection 1.4 A Short-Circuit Protection Yes Power-On Value Yes, programmable			
Over Voltage Protection240 VrmsInput Impedance>300 kΩCommon Mode Rejection86 dB minimumNormal Mode Rejection100 dBTemperature OutputYesConsistencyYesStable TemperatureYesOutput in the FieldYesOpen Wire DetectionYesDigital Output6TypeIsolated open collectorSink/Source (NPN/PNP)SinkMaximum Load Current700 mA/channelLoad Voltage5 to 50 VdcOvervoltage Protection1.4 AShort-Circuit ProtectionYesPower-On ValueYes, programmable			
Input Impedance >300 kΩ Common Mode Rejection 86 dB minimum Normal Mode Rejection 100 dB Temperature Output Yes Consistency Yes Stable Temperature Yes Output in the Field Yes Digital Output Yes Channels 6 Type Isolated open collector Sink/Source (NPN/PNP) Sink Maximum Load Current 700 mA/channel Load Voltage 5 to 50 Vdc Overvoltage Protection 1.4 A Short-Circuit Protection Yes Power-On Value Yes, programmable			
Common Mode Rejection86 dB minimumNormal Mode Rejection100 dBTemperature OutputYesConsistencyYesStable TemperatureYesOutput in the FieldYesOpen Wire DetectionYesDigital Output6TypeIsolated open collectorSink/Source (NPN/PNP)SinkMaximum Load Current700 mA/channelLoad Voltage5 to 50 VdcOvervoltage Protection60 VdcOverload Protection1.4 AShort-Circuit ProtectionYes, programmable			
Normal Mode Rejection100 dBTemperature Output ConsistencyYesStable Temperature Output in the FieldYesOpen Wire DetectionYesDigital Output6TypeIsolated open collectorSink/Source (NPN/PNP)SinkMaximum Load Current700 mA/channelLoad Voltage5 to 50 VdcOvervoltage Protection1.4 AShort-Circuit ProtectionYes, programmable			
Temperature Output ConsistencyYesStable Temperature Output in the FieldYesOpen Wire DetectionYesDigital OutputYesChannels6TypeIsolated open collectorSink/Source (NPN/PNP)SinkMaximum Load Current700 mA/channelLoad Voltage5 to 50 VdcOvervoltage Protection60 VdcOverload Protection1.4 AShort-Circuit ProtectionYes, programmable			
ConsistencyYesStable Temperature Output in the FieldYesOpen Wire DetectionYesDigital OutputYesChannels6TypeIsolated open collectorSink/Source (NPN/PNP)SinkMaximum Load Current700 mA/channelLoad Voltage5 to 50 VdcOvervoltage Protection60 VdcOverload Protection1.4 AShort-Circuit ProtectionYesPower-On ValueYes, programmable		100 dB	
Stable Temperature Output in the FieldYesOpen Wire DetectionYesDigital OutputYesChannels6TypeIsolated open collectorSink/Source (NPN/PNP)SinkMaximum Load Current700 mA/channelLoad Voltage5 to 50 VdcOvervoltage Protection60 VdcOverload Protection1.4 AShort-Circuit ProtectionYesPower-On ValueYes, programmable	-	Yes	
Output in the FieldYesOpen Wire DetectionYesDigital OutputChannels6TypeIsolated open collectorSink/Source (NPN/PNP)SinkMaximum Load Current700 mA/channelLoad Voltage5 to 50 VdcOvervoltage Protection60 VdcOverload Protection1.4 AShort-Circuit ProtectionYesPower-On ValueYes, programmable			
Open Wire DetectionYesDigital OutputChannels6TypeIsolated open collectorSink/Source (NPN/PNP)SinkMaximum Load Current700 mA/channelLoad Voltage5 to 50 VdcOvervoltage Protection60 VdcOverload Protection1.4 AShort-Circuit ProtectionYesPower-On ValueYes, programmable	-	Yes	
Digital OutputChannels6TypeIsolated open collectorSink/Source (NPN/PNP)SinkMaximum Load Current700 mA/channelLoad Voltage5 to 50 VdcOvervoltage Protection60 VdcOverload Protection1.4 AShort-Circuit ProtectionYesPower-On ValueYes, programmable			
Channels6TypeIsolated open collectorSink/Source (NPN/PNP)SinkMaximum Load Current700 mA/channelLoad Voltage5 to 50 VdcOvervoltage Protection60 VdcOverload Protection1.4 AShort-Circuit ProtectionYesPower-On ValueYes, programmable	-	Yes	
TypeIsolated open collectorSink/Source (NPN/PNP)SinkMaximum Load Current700 mA/channelLoad Voltage5 to 50 VdcOvervoltage Protection60 VdcOverload Protection1.4 AShort-Circuit ProtectionYesPower-On ValueYes, programmable		6	
Sink/Source (NPN/PNP)SinkMaximum Load Current700 mA/channelLoad Voltage5 to 50 VdcOvervoltage Protection60 VdcOverload Protection1.4 AShort-Circuit ProtectionYesPower-On ValueYes, programmable		•	
Maximum Load Current700 mA/channelLoad Voltage5 to 50 VdcOvervoltage Protection60 VdcOverload Protection1.4 AShort-Circuit ProtectionYesPower-On ValueYes, programmable			
Load Voltage5 to 50 VdcOvervoltage Protection60 VdcOverload Protection1.4 AShort-Circuit ProtectionYesPower-On ValueYes, programmable			
Overvoltage Protection60 VdcOverload Protection1.4 AShort-Circuit ProtectionYesPower-On ValueYes, programmable			
Overload Protection1.4 AShort-Circuit ProtectionYesPower-On ValueYes, programmable			
Short-Circuit ProtectionYesPower-On ValueYes, programmable			
Power-On Value Yes, programmable			
	Safe Value	Yes, programmable	







	5 to 50 Vac	5 to 50 Vdc	
Model No.	Description		
OME-ET-7019Z	10-channel thermocouple input module with OME-DB	10-channel thermocouple input module with OME-DB-1820 daughter board	
OME-PET-7019Z	10-channel thermocouple input module with OME-DB	3-1820 daughter board with PoE	
RAIL-35-1	35 mm (1.4") DIN rail, 1 m (3.3') length		
iDRN-PS-1000	PS-1000 DIN rail power supply, 95 to 240 Vac input, 24 Vdc output at 850 mA		
OM-ESW-105	5-port unmanaged ethernet switch		
OM-ESW-105-POE	5-port POE ethernet switch (four 10/100 base TX ports with POE and one 10/100 base TX uplink port)		

Comes complete with wall mount bracket, quick start guide, utility software and operator's manual on CD. Ordering Example: OME-ET-7019Z 10-channel thermocouple input module with OME-DB-1820 daughter board and OCW-1 OMEGACARESM extends standard 1-year warranty to a total of 2 years.

Multifunction Analog/Digital I/O Modules

OME-ET-7026/OME-PET-7026



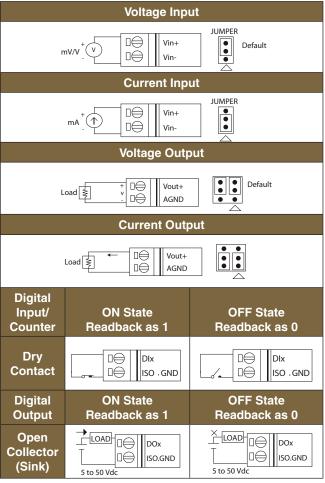
- Built-In Web Server
- 🛩 Web HMI
- Support for Both MODBUS® TCP and MODBUS UDP Protocols
- Communication Security
- Dual Watchdog
- Wide Operating Temperature Range: -25 to 75°C (-13 to 167°F)
- ✓ I/O Pair Connection
- Built-In I/O
 - Al: 6 Channels with 240 Vrms Overvoltage Protection
 - AO: 2 Channels
 - DI/Counter: 2 Channels
 - DO: 2 Channels

Applications

- Building Automation
- Factory Automation
- ✓ Machine Automation
- ✓ Remote Maintenance
- Remote Diagnosis
- ✓ Testing Equipment

The OME-ET-7026/OME-PET-7026 is a web-based Ethernet I/O module that features a built-in web server which allows remote configuration, I/O monitoring and I/O control simply by using a regular web browser. Remote control is as easy as browsing the Internet. In addition, the web HMI function means that programming or HTML skills are no longer required so creating dynamic and attractive web pages for I/O monitoring and I/O control purposes is easy. The OME-ET-7026/ OME-PET-7026 offers easy and safe access for users at anytime and from any location, and also supports the MODBUS TCP protocol that ensures perfect integration with SCADA software. Furthermore, the OME-PET-7026 features "PoE", meaning that not only is data transmitted through an Ethernet cable but also power making installation of the OME-PET-7026 easy. No more unnecessary wires with only an Ethernet cable being required to take care of everything in the field. The OME-ET-7026/OME-PET-7026 is a multi-function module; there are 6-channel analog inputs, 2-channel analog output, 2-channel digital inputs and 2-channel digital outputs. It provides programmable input range on all analog inputs (±500 mV, ±1 V, ±5 V, ±10 V, ±20 mA, 0 to 20 mA and 4 to 20 mA), analog outputs are 12 bit with ±5 V, ±10 V, 0 to 20 mÅ and 4 to 20 mA and digital output can be set as alarm output. Each analog input is allowed to configure an individual range and has 240 Vrms high overvoltage protection. Modules are jumper selectable for voltage or current inputs/outputs.

Wire Connections



Pin Assignments



Models	OME-ET-7026	OME-PET-7026	
Software			
Built-in Web	Yes		
Server Web HMI	Yes		
I/O Pair	Yes		
Connection	Yes		
Communication	10/100 hear TV w		
Ethernet Port PoE	10/100 base-1X w	ith auto MDI/MDI-X Yes	
Poe		MODBUS UDP	
Security		d and IP filter	
	Yes, module (0.8 sec	onds), communication	
Dual Watchdog	(prograi	mmable)	
LED Indicators			
L1 (System Running)	Y	es	
L2 (Ethernet	Y	es	
Link/Act) L3 (Ethernet	Y	es	
10/100 M Speed)		Yes	
PoE Power 2-Way Isolation		tes	
Ethernet	1500 Vdc		
I/O	2500 Vdc	2500 Vdc	
EMS Protection			
ESD	4 kV contact for each terminal and		
(IEC 61000-4-2) EFT		random point	
(IEC 61000-4-4)	±4 kV for power		
Power Requirements			
Reverse Polarity	Y	es	
Protection Powered from			
Terminal Block	Yes, 10 to 30 Vdc	Yes, 12 to 48 Vdc	
Powered from PoE	_	Yes, IEEE 802.3af, class1	
Consumption	3.1 W	4.2 W	
Mechanical	0		
Dimensions			
(W x L x D)	DIN-rail or wall mounting		
Installation Environment	Din-rail of v	van mounting	
Operating	-25 to 75°C (-13 to 167°F)	
Temperature Storage		,	
Temperature		-22 to 176°F)	
Humidity	10 to 90% RH,	non-condensing	
Model No.	Description		
OME-ET-7026			
OME-PET-7026	Multifunction analog/digital I/O PoE module		
RAIL-35-1	35 mm (1.4") DIN rail, 1 m (3.3') length		
iDRN-PS-1000	DIN rail power supply, 95 to 240 Vac input, 24 Vdc output at 850 mA		
OM-ESW-105	5-port unmanaged		
OM-ESW-105-POE	5-port POE ethernet switch (four 10/100		

Comes complete with wall mount bracket, quick start guide, utility software and operator's manual on CD.

Ordering Example: OME-ET-7026 multifunction analog/digital I/O module and OCW-1 OMEGACARESM extends standard 1-year warranty to a total of 2 years.

I/O Specifications

I/O Specificati	0115		
Analog Input Channels		6 (differential)	
Channels		6 (differential) ±500 mV, ±1V, ±5 V, ±10 V	
Туре		\pm 500 mV, \pm 1V, \pm 5 V, \pm 10 V 0 to 20 mA, \pm 20 mA, 4 to	
		20 mA (jumper selectable)	
Individual Channe	əl	Yes	
Configuration			
Resolution	al Mode	16-bit	
Fast N		12-bit	
	al Mode	10 samples/second (total)	
Rate Fast N		60 samples/second (total)	
	al Mode	±0.1%	
	lode	±0.5% or better	
Zero Drift		±20 μV/°C	
Span Drift		±25 ppm/°C	
Overvoltage Prote	ection	240 Vrms	
Input Impedance		2 MΩ	
Common Mode R		86 dB minimum	
Normal Mode Rej	ection	100 dB	
Analog Output			
Channels		2 O to 5 V do 5 V do . 0 V do to	
Туре		0 to 5 Vdc, ±5 Vdc, 0 Vdc to 10 Vdc, ±10 Vdc, 0 to 20 mA,	
туре		4 to 20 mA (jumper selectable)	
Individual Channe		· · · · · · · · · · · · · · · · · · ·	
Configuration		Yes	
Resolution		12-bit	
Accuracy		±0.1% of FSR	
Voltage Output Ca		20 mA @ 10 V	
Current Load Res		500 Ω	
Open Wire Detect	ion	Yes, for 4 to 20 mA only	
Power-on Value		Yes, programmable	
Safe Value		Yes, programmable	
Digital Input/Counter			
Channels		2	
On Vo	Itage Level	Close to GND	
On Vol Dry Off Vo	ltage Level Itage Level		
On Vol Dry Off Vo Contact Effecti	Itage Level Itage Level ive	Close to GND Open	
On Vol Dry Off Vo Contact Effecti (Source) Distan	Itage Level Itage Level ive ice for Dry	Close to GND	
On Vol Dry Off Vo Contact (Source) Distan Conta	Itage Level Itage Level ive ice for Dry ct	Close to GND Open	
Or VolDryOff VolContactEffecti(Source)DistanContactContactWetOn VolcontactVol	Itage Level Itage Level ive ice for Dry ct Itage Level	Close to GND Open 500 M maximum	
On VolDryOff VolContactEffecti(Source)DistanContactContactWetOn VolcontactOff Vol	Itage Level Itage Level ive ice for Dry ct	Close to GND Open 500 M maximum	
On VolDryOff VolContactEffecti(Source)DistanContactOn VolcontactOn Vol(Sink/Off VolSource)Off Vol	Itage Level Itage Level ive ice for Dry ct Itage Level Itage Level	Close to GND Open 500 M maximum 1 Vdc maximum 3.5 to 30 Vdc	
On VolDryOff VolContactEffecti(Source)DistanContactOn VolcontactOn Vol(Sink/Off VolSource)Chann	Itage Level Itage Level ive ice for Dry ct Itage Level Itage Level iels	Close to GND Open 500 M maximum 1 Vdc maximum 3.5 to 30 Vdc 2	
Dry Contact (Source)On Vol Off Vol Effecti Distam Contact (Sink/ Source)Wet contact (Sink/ Source)On Vol Off Vol Off Vol Chann Maxim Maxim	Itage Level Itage Level ive ice for Dry ct Itage Level Itage Level nels	Close to GND Open 500 M maximum 1 Vdc maximum 3.5 to 30 Vdc 2 4,294,967,285 (32-bit)	
On Vol Ory Off Vo Contact (Source) Distan Contact (Sink/ On Vol contact (Sink/ Off Vo Source) Chann Maxim	Itage Level Itage Level ive ice for Dry ct Itage Level Itage Level nels num Count	Close to GND Open 500 M maximum 1 Vdc maximum 3.5 to 30 Vdc 2	
Counters Countant (Source)	Itage Level Itage Level ive occ for Dry ct Itage Level Itage Level nels num Count num Input ency	Close to GND Open 500 M maximum 1 Vdc maximum 3.5 to 30 Vdc 2 4,294,967,285 (32-bit) 100 Hz	
Counters Counters Counters Contact (Source) Contact (Sink/ Counters Counters Counters Counters Convolution Convolu	Itage Level Itage Level ive ice for Dry ct Itage Level Itage Level nels num Count num Input ency um Pulse	Close to GND Open 500 M maximum 1 Vdc maximum 3.5 to 30 Vdc 2 4,294,967,285 (32-bit)	
Counters Countact (Source) Wet (Sink/ Counters Counters Counters Counters Counters Counters Countage Protect	Itage Level Itage Level ive ice for Dry ct Itage Level Itage Level nels num Count num Input ency um Pulse	Close to GND Open 500 M maximum 1 Vdc maximum 3.5 to 30 Vdc 2 4,294,967,285 (32-bit) 100 Hz	
Counters Countact (Source) Wet (Sink/ Counters Counters Counters Counters Counters Counters Counters Counters Countage Protect Digital Output	Itage Level Itage Level ive ice for Dry ct Itage Level Itage Level nels num Count num Input ency um Pulse	Close to GND Open 500 M maximum 1 Vdc maximum 3.5 to 30 Vdc 2 4,294,967,285 (32-bit) 100 Hz 5 ms 30 Vdc	
On Vol Off Vol Contact (Source)On Vol Effecti Distam Contact (Sink/ Source)Wet contact (Sink/ Source)On Vol Contact Off Vol SourceCountersChann Maxim Freque Minim WidthOvervoltage Prote Digital Output ChannelsOn Vol Contact Contact Off Vol	Itage Level Itage Level ive ice for Dry ct Itage Level Itage Level nels num Count num Input ency um Pulse	Close to GND Open 500 M maximum 1 Vdc maximum 3.5 to 30 Vdc 2 4,294,967,285 (32-bit) 100 Hz 5 ms 30 Vdc 2 2	
Ory Contact (Source)On Vol Off Vol Effecti Distam Contact (Sink/ Source)Wet contact (Sink/ Source)On Vol Contact Off Vol Off Vol Off Vol Off Vol Off Vol Off Vol Source Digital Output Channels Type	Itage Level Itage Level ive for Dry ct Itage Level Itage Level num Count num Input ency um Pulse	Close to GND Open 500 M maximum 1 Vdc maximum 3.5 to 30 Vdc 2 4,294,967,285 (32-bit) 100 Hz 5 ms 30 Vdc 2 1solated open collector	
On Vol Off Vol Contact (Source)On Vol Off Vol Effecti Distam Contact (Sink/ Source)Wet contact (Sink/ Source)On Vol Contact Off Vol Off Vol Off Vol Off Vol Off Vol Off Vol Source)Counters CountersChann Maxim Freque Minim WidthOvervoltage Prote Digital Output ChannelsTypeSink/Source (NPN)	Itage Level Itage Level ive for Dry ct Itage Level Itage Level Itage Level num Count num Input ency um Pulse ection	Close to GND Open 500 M maximum 1 Vdc maximum 3.5 to 30 Vdc 2 4,294,967,285 (32-bit) 100 Hz 5 ms 30 Vdc 2 lsolated open collector Sink	
On Vol Off Vol Contact (Source)Off Vol Effecti Distam Contact (Sink/ Source)Wet (Sink/ Source)On Vol Contact Off Vol Source)CountersChann Maxim Freque Minim WidthOvervoltage Prote Digital Output Channels TypeProte Sink/Source (NPN Maximum Load C	Itage Level Itage Level ive for Dry ct Itage Level Itage Level Itage Level num Count num Input ency um Pulse ection	Close to GND Open 500 M maximum 1 Vdc maximum 3.5 to 30 Vdc 2 4,294,967,285 (32-bit) 100 Hz 5 ms 30 Vdc 2 Isolated open collector Sink 700 mA/channel	
On Vol Dry Off Vol Contact Effecti Distar Contact Wet On Vol contact On Vol (Sink/ Off Vol Source) Off Vol Source) Off Vol Counters Channel Freque Maxim Woth Overvoltage Prote Digital Output Channels Type Sink/Source (NPN Maximum Load C Load Voltage	Itage Level Itage Level ive foce for Dry t Itage Level Itage Level	Close to GND Open 500 M maximum 1 Vdc maximum 3.5 to 30 Vdc 2 4,294,967,285 (32-bit) 100 Hz 5 ms 30 Vdc 2 Isolated open collector Sink 700 mA/channel 5 to 50 Vdc	
On Vol Off Vol Contact (Source)Off Vol Effecti Distam Contact (Sink/ Source)Wet contact (Sink/ Source)On Vol Contact Off Vol Off Vol Off Vol Off Vol Off Vol Off Vol Source)Counters CountersChann Maxim Freque Minim WidthOvervoltage Protect Digital Output ChannelsTypeSink/Source (NPN Maximum Load C Load Voltage Overvoltage Protect	Itage Level Itage Level ive foce for Dry ct Itage Level Itage Leve	Close to GND Open 500 M maximum 1 Vdc maximum 3.5 to 30 Vdc 2 4,294,967,285 (32-bit) 100 Hz 5 ms 30 Vdc 2 Isolated open collector Sink 700 mA/channel 5 to 50 Vdc 60 Vdc	
On Vol Off Vo Contact (Source)Off Vo Effecti Distam Contact (Sink/ Off Vo Source)Wet contact (Sink/ Source)On Vol Contact Off Vo Off Vo Off Vo Off Vo Off Vo Off Vo Off Vo Source)CountersChann Maxim Freque Minim WidthOvervoltage Prote Digital Output ChannelsTypeSink/Source (NPN Maximum Load C Load Voltage Overvoltage Prote Overload Protecti	Itage Level Itage Level ive ice for Dry ct Itage Level Itage Level Itage Level inels num Count num Input ency um Pulse ection	Close to GND Open 500 M maximum 1 Vdc maximum 3.5 to 30 Vdc 2 4,294,967,285 (32-bit) 100 Hz 5 ms 30 Vdc 2 Isolated open collector Sink 700 mA/channel 5 to 50 Vdc 60 Vdc 1.4 A	
On Vol Off Vo Contact (Source)Off Vo Effecti Distan ContaWet contact (Sink/ Source)On Vol Conta On Vol Off VoCountersChanne Maxim Freque Minim WidthOvervoltage Prote Digital Output ChannelsJinter TypeSink/Source (NPN Maximum Load C Load Voltage Overvoltage Prote Overload Protecti Short-Circuit Prote	Itage Level Itage Level ive ice for Dry ct Itage Level Itage Level Itage Level inels num Count num Input ency um Pulse ection	Close to GND Open 500 M maximum 1 Vdc maximum 3.5 to 30 Vdc 2 4,294,967,285 (32-bit) 100 Hz 5 ms 30 Vdc 2 Isolated open collector Sink 700 mA/channel 5 to 50 Vdc 60 Vdc 1.4 A Yes	
On VolDryOff VolContactOff VolContactEffectiDistamContactWetOn VolcontactOff VolSource)Off VolSource)ChannMaximMaximCountersMaximMaximFrequeMinimWidthOvervoltageProtectionDigital OutputChannelsTypeSink/Source (NPN)Maximum Load CLoad VoltageOvervoltageProtectionOverloadProtection	Itage Level Itage Level ive ice for Dry ct Itage Level Itage Level Itage Level inels num Count num Input ency um Pulse ection	Close to GND Open 500 M maximum 1 Vdc maximum 3.5 to 30 Vdc 2 4,294,967,285 (32-bit) 100 Hz 5 ms 30 Vdc 2 Isolated open collector Sink 700 mA/channel 5 to 50 Vdc 60 Vdc 1.4 A	

16-Channel Isolated Digital Output Modules

OME-ET-7042/OME-PET-7042



0000000000000000

O,

- Built-In Web Server
- 🛩 Web HMI
- ✓ Support for both MODBUS[®] TCP and MODBUS UDP Protocols
- Communication Security
- Dual Watchdog
- ✓ Wide Operating Temperature Range: -25 to 75°C (-13 to 167°F)
- ✓ I/O Pair Connection
- Built-In I/O
- DO: 16 Channels

Applications

- Building Automation
- ✓ Factory Automation
- Machine Automation
- Remote Maintenance
- Remote Diagnosis
- ✓ Testing Equipment

CPU: 80186-80 E1 : 10/100 Base TX OJO: 160 Base TX Output Conen Colle 100mA/channel Output Voltage DIndicat

O Unit

00

04

OME-ET-7042 shown actual size.

OME-PET-7042 shown actual size.

........

The OME-ET-7042/OME-PET-7042 is a web-based Ethernet digital output module that features a built-in web server which allows configuration, I/O monitoring and I/O control by simply using a web browser. Using the web HMI function, no more programming or HTML skills are required. The user can create dynamic and attractive web pages easily. The module offers easy and safe access for users at anytime and from any location. It also supports MODBUS TCP protocol that makes perfect integration to SCADA software. The module provides 16 sink-type digital output channels. It features optical isolation for 3750 Vrms of transient overvoltage protection and doesn't have channel-to-channel isolation. The power-on value and safe value of digital output channel are programmable.

System Specifications

System Specificat	10113		
Models	OME-ET-7042	OME-PET-7042	
Software			
Built-in Web Server	Yes		
Web HMI		Yes	
I/O Pair Connection		Yes	
Communication	_		
Ethernet Port		TX with auto MDI/ IDI-X	
PoE		Yes	
Protocol		P, MODBUS UDP	
Security		ord and IP filter	
Dual Watchdog	Yes, module communicatio	e (0.8 seconds), n (programmable)	
LED Indicators	-		
L1 (System Running)		Yes	
L2 (Ethernet Link/Act)		Yes	
L3 (Ethernet 10/100 M Speed)		Yes	
PoE Power	— Yes		
2-Way Isolation			
Ethernet	1500 Vdc	—	
I/O	3750 Vrms	3750 Vrms	
EMS Protection			
ESD (IEC 61000-4-2)		for each terminal	
EFT (IEC 61000-4-4)	±2 kV	for power	
Power Requirements	-		
Reverse Polarity Protection		Yes	
Powered from Terminal Block	Yes, 10 to 30 Vdc	Yes, 12 to 48 Vdc	
Powered from PoE	_	Yes, IEEE 802.3af, class1	
Consumption	2.7 W	3.0 W	
Mechanical			
Dimensions (W x L x D)	72 x 123 x 35 mm (2.83 x 4.84 x 1.37")		
Installation	DIN-rail or wall mounting		
Environment			
Operating Temperature	-25 to 75°C	; (-13 to 167°F)	
Storage Temperature		; (-22 to 176°F)	
Humidity	10 to 90% RH, non-condensing		

To Order Visit omega.com/ome-et-7000_ome-pet-7000 for Pricing and Details			
Model No.	Description		
OME-ET-7042	16-channel isolated digital output module		
OME-PET-7042	16-channel isolated digital output module with PoE		
RAIL-35-1	35 mm (1.4") DIN rail, 1 m (3.3') length		
iDRN-PS-1000	DIN rail power supply, 95 to 240 Vac input, 24 Vdc output at 850 mA		
OM-ESW-105	5-port unmanaged ethernet switch		
OM-ESW-105-POE	5-port POE ethernet switch (four 10/100 base TX ports with POE and one 10/100 base TX uplink port)		

Comes complete with wall mount bracket, quick start guide, utility software and operator's manual on CD.

Ordering Example: OME-ET-7042 16-channel isolated digital output module and **OCW-1** OMEGACARESM extends standard 1-year warranty to a total of 2 years.

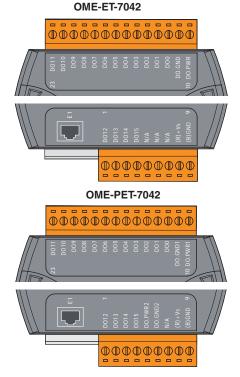
I/O Specifications

Models	OME-ET-7042	OME-PET-7042	
Digital Output			
Channels	1	6	
Туре	Isolated op	en collector	
Sink/Source (NPN/PNP)	Sink		
Maximum Load Current	100 mA/channel at 25°C direct drive power relay module		
Load Voltage	5 Vdc to 30 Vdc		
Overvoltage Protection	— 60 Vdc		
Overload Protection	— 1.3 A		
Short-circuit Protection	_	Yes	
Power-on Value	Yes, programmable		
Safe Value	Yes, programmable		

Wire Connections

Output Type	ON State Readback as 1	OFF State Readback as 0	
Drive Delay			
Resistance Load		+ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	

Pin Assignments



8-Channel DI and 8-Channel Isolated Digital Output Modules

OME-ET-7044/OME-PET-7044



- Built-In Web Server
- 🛩 Web HMI
- Support for both MODBUS® TCP and MODBUS UDP Protocols
- Communication Security
- Dual Watchdog
- ✓ Wide Operating Temperature Range: -25 to 75°C (-13 to 167°F)
- I/O Pair Connection
- ✓ Built-In I/O
 - DI/Counter: 8 Channels
 - DO: 8 Channels

Applications

- Building Automation
- Factory Automation
- Machine Automation
- Remote Maintenance
- Remote Diagnosis
- Testing Equipment

The OME-ET-7044/OME-PET-7044 is a web-based Ethernet digital I/O module that features a built-in web server which allows configuration, I/O monitoring and I/O control by simply using a web browser. Using the web HMI function, no more programming or HTML skills are required. The user can create dynamic and attractive web pages easily. The module offers easy and safe access for users at anytime and from any location. It also supports MODBUS TCP protocol that makes perfect integration to SCADA software.

Wire Connections



The module provides 8 wet contact digital input channels and 8 sink-type digital output channels. It features optical isolation for 3750 Vrms of transient overvoltage protection but doesn't provide channel-tochannel isolation. Each input channel can be used as a 32-bit counter and each output channel can drive 300 mA load. The power-on value and safe value of digital output channel are programmable. It can safely be used in applications where hazardous voltages are present.

Digital Input/Counter	Readback as 1	Readback as 0	
	10 to 50 Vdc	Open or < 4 Vdc	
Sink	The second seco	INX 10K → → IN. COM IN. COM	
	10 to 50 Vdc	Open or < 4 Vdc	
Source	INX 10K INX 10K IN	INX TOK INX TOK To ther IN.COM To other in.com	
Output Type	ON State Readback as 1	OFF State Readback as 0	
Drive Relay			
Resistance Load	+ ↓ +↓ □ □ □ DO.PWR DOx □ □ Dox Do.GND		

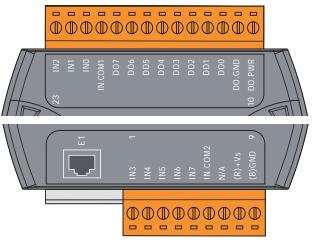
System Specifications

System Specific		
Models	OME-ET-7044	OME-PET-7044
Software		
Built-in Web Server	Ye	
Web HMI	Ye	es
I/O Pair Connection	Ye	es
Communication		
Ethernet Port		K with auto MDI/ N-X
PoE		Yes
Protocol	MODBUS TCP,	MODBUS UDP
Security		and IP filter
Dual Watchdog	Yes, module (
LED Indicators		Ч б ́́́
L1 (System Running)	Ye	es
L2 (Ethernet Link/Act)	Ye	es
L3 (Ethernet 10/100 M Speed)	Ye	es
PoE Power	_	Yes
2-Way Isolation		
Ethernet	1500 Vdc	_
I/O	3750 Vdc	3750 Vdc
EMS Protection		
ESD (IEC 61000-4-2)	4 kV contact fo	r each terminal
EFT (IEC 61000-4-4)	±2 kV fo	or power
Power Requirements		
Reverse Polarity Protection	Yes	
Powered from Terminal Block	Yes, 10 to 30 Vdc	Yes, 12 to 48 Vdc
Powered from PoE	Yes, IEEE 802.3af, class	
Consumption	2.4 W	3.0 W
Mechanical		
Dimensions	72 x 123 x 35 mm	
(W x L x D)	(6.77 x 4.84 x 1.38")	
Installation	DIN-rail or wall mounting	
Environment		
Operating Temperature	-25 to 75°C (-13 to 167°F)	
Storage Temperature	-30 to 80°C (-22 to 176°F)
Humidity	10 to 90% RH, non-condensing	

I/O Specifications

ivo specifications			
Digital Inp	ut/Counter		
Channels		8	
Contact		Wet contact	
Sink/Source	ce (NPN/PNP)	Sink/source	
On Voltage	e Level	10 to 50 Vdc	
Off Voltage	e Level	4 Vdc maximum	
Input Impe	dance	10 kΩ	
	Maximum Count	4,294,967,285 (32 bits)	
Counters	Maximum Input Frequency	500 Hz	
	Minimum Pulse Width	1 ms	
Overvoltag	ge Protection	70 Vdc	
Digital Out	tput		
Channels		8	
Туре		Isolated open collector	
Sink/Source	ce (NPN/PNP)	Sink	
Maximum Load Current		300 mA/channel at 25°C (77°F) direct drive power relay module	
Load Voltage		10 to 40 Vdc	
Overvoltage Protection		60 Vdc	
Overload Protection		1.1 A	
Short-circu	uit Protection	Yes	
Power-on V	Value	Yes, programmable	
Safe Value		Yes, programmable	

Pin Assignments



To Order Visit omega.com/ome-et-7000_ome-pet-7000 for Pricing and Details		
Model No.	Description	
OME-ET-7044	8-channel DI and 8-channel DO module	
OME-PET-7044	8-channel DI and 8-channel DO module with PoE	
RAIL-35-1	35 mm (1.4") DIN rail, 1 m (3.3') length	
iDRN-PS-1000	DIN rail power supply, 95 to 240 Vac input, 24 Vdc output at 850 mA	
OM-ESW-105	5-port unmanaged ethernet switch	
OM-ESW-105-POE	5-port POE ethernet switch (four 10/100 base TX ports with POE and one 10/100 base TX uplink port)	

Comes complete with wall mount bracket, quick start guide, utility software and operator's manual on CD. Ordering Example: OME-ET-7044 8-channel DI and 8-channel DO module and OCW-1 OMEGACARESM extends standard 1-year warranty to a total of 2 years.

12-Channel DI and 6-Channel Isolated Digital Output Modules

OME-ET-7050/OME-PET-7050



- Built-In Web Server
- 🛩 Web HMI
- ✓ Support for both MODBUS[®] TCP and MODBUS UDP Protocols
- Communication Security
- Dual Watchdog
- Wide Operating Temperature Range: -25 to 75°C (-13 to 167°F)
- ✓ I/O Pair Connection
- ✓ Built-In I/O
 - DI/Counter: 12 Channels
 - DO: 6 Channels

Applications

- Building Automation
- Factory Automation
- Machine Automation
- Remote Maintenance
- Remote Diagnosis
- Testing Equipment

The OME-ET-7050/OME-PET-7050 is a web-based Ethernet digital I/O module that features a built-in web server which allows configuration, I/O monitoring and I/O control by simply using a web browser. Using the web HMI function, no more programming or HTML

Wire Connections



skills are required. The user can create dynamic and attractive web pages easily. The module offers easy and safe access for users at anytime and from any location. It also supports MODBUS TCP protocol that makes perfect integration to SCADA software.

Digital Input/Counter	Readback as 1	Readback as 0	
	10 to 50 Vdc	Open or < 4 Vdc	
Sink	INX 10K → → ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	INX 10K	
	10 to 50 Vdc	Open or < 4 Vdc	
Source	INX 10K INX 10K INX 10K INCOM INCOM INCOM	INX 10K - + INK TO ther : To other IN.COM	
Output Type	ON State Readback as 1	OFF State Readback as 0	
Drive Relay			
Resistance Load	+ - + + + + + + + + + + + + +	+ ↓ + + = □ ← DO.PWR DOx DOx DO.GND	

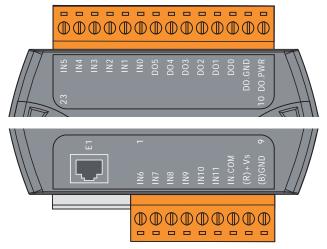


The module provides 12 wet contact digital input channels and 6 sink-type digital output channels. It features optical isolation for 3750 Vrms of transient overvoltage protection but doesn't provide channel-tochannel isolation. Each input channel can be used as a 32-bit counter and each output channel can drive 100 mA load. The power-on value and safe value of digital output channel are programmable.

System Specifications

SoftwareBuilt-in Web ServerYesWeb HMIYesI/O Pair ConnectionYesCommunication10/100 base-TX with auto MDI/ MDI-XEthernet Port10/100 base-TX with auto MDI/ MDI-XPoE—YesProtocolMODBUS TCP, MODBUS UDPSecurityID, password and IP filterDual WatchdogYes, module (0.8 seconds), communication (programmable)LED IndicatorsL2 (Ethernet Link/Act)L1 (System Running)YesL2 (EthernetYes10/100 M Speed)YesPoE Power—Yes2-Way IsolationEthernet1500 VdcIO3750 VrmsEMS ProtectionESD (IEC 61000-4-2)EMS Protection4 kV contact for each terminalEFT (IEC 61000-4-2)4 kV contact for powerPower RequirementsYes, 12 to 48 VdcPowered from Terminal BlockYes, IEEE	System Specificat		
Built-in Web ServerYesWeb HMIYesI/O Pair ConnectionYesCommunication10/100 base-TX with auto MDI/ MDI-XEthernet Port10/100 base-TX with auto MDI/ MDI-XPoE—YesProtocolMODBUS TCP, MODBUS UDPSecurityID, password and IP filterDual WatchdogYes, module (0.8 seconds), communication (programmable)LED IndicatorsIIL1 (System Running)YesL2 (Ethernet Link/Act)YesL3 (Ethernet 10/100 M Speed)YesPoE Power—YesYesSettlernet1500 VdcI/O3750 VrmsEMS ProtectionEthernetESD (IEC 61000-4-2)4 kV contact for each terminalEFT (IEC 61000-4-2)4 kV contact for powerPower RequirementsYesReverse Polarity ProtectionYes, Yes, 10 to 30 VdcPowered from Terminal BlockYes, IEEE	Models	OME-EI-7050	OME-PE1-7050
Web HMIYesI/O Pair ConnectionYesCommunication10/100 base-TX with auto MDI/ MDI-XEthernet Port10/100 base-TX with auto MDI/ MDI-XPoE—YesProtocolMODBUS TCP, MODBUS UDPSecurityID, password and IP filterDual WatchdogYes, module (0.8 seconds), communication (programmable)LED IndicatorsL1 (System Running)L1 (System Running)YesL2 (Ethernet Link/Act)Yes10/100 M Speed)YesPoE Power—Yey IsolationYesEthernet1500 VdcL03750 VrmsSProtectionS750 VrmsESD (IEC 61000-4-2)4 kV contact for each terminalEFT (IEC 61000-4-4)±2 kV for powerPower RequirementsYesReverse Polarity ProtectionYes, 12 to 48 VdcPowered from Terminal BlockYes, IEEE			
I/O Pair Connection Yes Communication 10/100 base-TX with auto MDI/ MDI-X PoE — Yes Protocol MODBUS TCP, MODBUS UDP Security ID, password and IP filter Dual Watchdog Yes, module (0.8 seconds), communication (programmable) LED Indicators II L1 (System Running) Yes L2 (Ethernet Link/Act) Yes L3 (Ethernet Yes 10/100 M Speed) Yes PoE Power — Yes 2-Way Isolation Yes Ethernet 1500 Vdc — I/O 3750 Vrms 3750 Vrms EMS Protection ESD (IEC 61000-4-2) 4 kV contact for each terminal EFT (IEC 61000-4-2) 4 kV contact for power Power Power Requirements Yes Yes Reverse Polarity Yes Yes Powered from Yes, 12 to 48 Vdc Powered from Yes, IEEE Yes, IEEE		Y	és
CommunicationEthernet Port10/100 base-TX with auto MDI/ MDI-XPoE—YesProtocolMODBUS TCP, MODBUS UDPSecurityID, password and IP filterDual WatchdogYes, module (0.8 seconds), communication (programmable)LED IndicatorsIII Yes, module (0.8 seconds), communication (programmable)L2 (Ethernet Link/Act)YesL3 (Ethernet 10/100 M Speed)YesPoE Power—Yes2-Way IsolationYesEthernet IO/1500 VdcEMS Protection3750 VrmsESD (IEC 61000-4-2)4 kV contact for each terminalEFT (IEC 61000-4-2)4 kV contact for powerPower RequirementsYesReverse Polarity 			
Ethernet Port10/100 base-TX with auto MDI/ MDI-XPoE—YesProtocolMODBUS TCP, MODBUS UDPSecurityID, password and IP filterDual WatchdogYes, module (0.8 seconds), communication (programmable)LED IndicatorsYesL1 (System Running)YesL2 (Ethernet Link/Act)YesNo B Power—YesYes2-Way IsolationYesEthernet1500 VdcI/O3750 VrmsBS ProtectionSafety VresESD (IEC 61000-4-2)4 kV contact for each terminalEFT (IEC 61000-4-4)±2 kV for powerPower RequirementsYesReverse Polarity ProtectionYes, Yes, 10 to 30 VdcPowered from Terminal BlockYes, Yes, IEEE	I/O Pair Connection	Y	és
Ethernet PortMDI-XPoE—YesProtocolMODBUS TCP, MODBUS UDPSecurityID, password and IP filterDual WatchdogYes, module (0.8 seconds), communication (programmable)LED IndicatorsIII (System Running)L2 (Ethernet Link/Act)YesL3 (EthernetYes10/100 M Speed)YesPoE Power—YesYes2-Way IsolationYesEthernet1500 VdcI/O3750 VrmsSProtectionS750 VrmsESD (IEC 61000-4-2)4 kV contact for each terminalEFT (IEC 61000-4-4)±2 kV for powerPower RequirementsYesReverse PolarityYesPowered fromYes, 12 to 48 VdcPoworad from PoEYes, IEEE	Communication		
ProtocolMODBUS TCP, MODBUS UDPSecurityID, password and IP filterDual WatchdogYes, module (0.8 seconds), communication (programmable)LED IndicatorsIII (System Running)L2 (Ethernet Link/Act)YesL3 (EthernetYes10/100 M Speed)YesPoE Power—YesYes2-Way IsolationYesEthernet1500 VdcIO3750 VrmsSProtectionS750 VrmsESD (IEC 61000-4-2)4 kV contact for each terminalEFT (IEC 61000-4-4)±2 kV for powerPower RequirementsYesReverse PolarityYesPowered from Terminal BlockYes, 12 to 48 VdcPoworad from PoEYes, IEEE	Ethernet Port		
Security ID, password and IP filter Dual Watchdog Yes, module (0.8 seconds), communication (programmable) LED Indicators Lit (System Running) Yes L1 (System Running) Yes Yes L2 (Ethernet Link/Act) Yes Yes L3 (Ethernet 10/100 M Speed) Yes Yes PoE Power — Yes 2-Way Isolation Ethernet 1500 Vdc — I/O 3750 Vrms 3750 Vrms S750 Vrms EMS Protection ESD (IEC 61000-4-2) 4 kV contact for each terminal EFT (IEC 61000-4-4) ±2 kV for power Power Requirements Yes Power dfrom Yes, 12 to 48 Vdc Powerad from Yes, IEEE Yes, IEEE	PoE	_	
Dual WatchdogYes, module (0.8 seconds), communication (programmable)LED IndicatorsL1 (System Running)YesL2 (Ethernet Link/Act)YesL3 (EthernetYes10/100 M Speed)YesPoE Power—2-Way IsolationYesEthernet1500 VdcI/O3750 VrmsSProtectionSafe of the second sec	Protocol	MODBUS TCP	MODBUS UDP
Dual watchoog communication (programmable) LED Indicators	Security	ID, passwor	d and IP filter
LED Indicators L1 (System Running) L2 (Ethernet Link/Act) Yes L3 (Ethernet 10/100 M Speed) PoE Power - Yes 2-Way Isolation Ethernet 1500 Vdc - I/O 3750 Vrms 3750 Vrms 3750 Vrms EMS Protection ESD (IEC 61000-4-2) 4 kV contact for each terminal EFT (IEC 61000-4-4) ±2 kV for power Power Requirements Reverse Polarity Protection Powered from Yes, 10 to 30 Vdc Yes, IEEE	Duel Wetekder	Yes, module	(0.8 seconds),
LED Indicators L1 (System Running) Yes L2 (Ethernet Link/Act) Yes L3 (Ethernet Yes 10/100 M Speed) Yes PoE Power — 2-Way Isolation Yes Ethernet 1500 Vdc — I/O 3750 Vrms 3750 Vrms EMS Protection ESD (IEC 61000-4-2) 4 kV contact for each terminal EFT (IEC 61000-4-4) ±2 kV for power Power Requirements Reverse Polarity Protection Yes Powered from Yes, 12 to 48 Vdc Powered from PoE Yes, IEEE	Dual watchdog	communication	(programmable)
L2 (Ethernet Link/Act) Yes L3 (Ethernet Yes 10/100 M Speed) Yes PoE Power — Yes 2-Way Isolation	LED Indicators		
L2 (Ethernet Link/Act) Yes L3 (Ethernet Yes 10/100 M Speed) Yes PoE Power — 2-Way Isolation Yes Ethernet 1500 Vdc I/O 3750 Vrms SPote C 61000-4-2) 4 kV contact for each terminal EFT (IEC 61000-4-2) 4 kV contact for power Power Requirements Yes Reverse Polarity Yes Powered from Yes, 12 to 48 Vdc Powered from PoE Yes, IEEE	L1 (System Running)	Y	′es
L3 (Ethernet Yes 10/100 M Speed) Yes PoE Power — Yes 2-Way Isolation Ethernet 1500 Vdc — I/O 3750 Vrms 3750 Vrms 3750 Vrms EMS Protection ESD (IEC 61000-4-2) 4 kV contact for each terminal EFT (IEC 61000-4-4) EFT (IEC 61000-4-4) ±2 kV for power Power Power Requirements Reverse Polarity Yes Protection Yes, 12 to 48 Vdc Powered from Yes, 12 to 48 Vdc Powered from Yes, IEEE		Y	′es
10/100 M Speed) Yes PoE Power — Yes 2-Way Isolation Ethernet 1500 Vdc — I/O 3750 Vrms 3750 Vrms EMS Protection ESD (IEC 61000-4-2) 4 kV contact for each terminal EFT (IEC 61000-4-4) ±2 kV for power Power Requirements Reverse Polarity Protection Yes Powered from Yes, 12 to 48 Vdc Powerad from PoE Yes, IEEE			,
PoE Power — Yes 2-Way Isolation Ethernet 1500 Vdc — Ethernet 1500 Vdc — I/O I/O 3750 Vrms 3750 Vrms EMS Protection ESD (IEC 61000-4-2) 4 kV contact for each terminal EFT (IEC 61000-4-4) ±2 kV for power Power Requirements Reverse Polarity Protection Yes, Powered from Yes, Terminal Block 10 to 30 Vdc Powered from Yes, IEEE		Y	es
2-Way Isolation Ethernet 1500 Vdc — I/O 3750 Vrms 3750 Vrms EMS Protection ESD (IEC 61000-4-2) 4 kV contact for each terminal EFT (IEC 61000-4-4) ±2 kV for power Power Requirements Reverse Polarity Protection Yes Powered from Yes, 12 to 48 Vdc Powerand from PoE Yes, IEEE		_	Yes
Ethernet 1500 Vdc I/O 3750 Vrms 3750 Vrms EMS Protection ESD (IEC 61000-4-2) 4 kV contact for each terminal EFT (IEC 61000-4-4) ±2 kV for power Power Requirements Power Requirements Reverse Polarity Yes Powered from Yes, 12 to 48 Vdc Powerad from PoE Yes, IEEE		-	
I/O 3750 Vrms 3750 Vrms EMS Protection ESD (IEC 61000-4-2) 4 kV contact for each terminal EFT (IEC 61000-4-4) ±2 kV for power Power Requirements EVERTIME Reverse Polarity Yes Powered from Yes, 10 to 30 Vdc Terminal Block Yes, IEEE		1500 Vdc	
EMS Protection ESD (IEC 61000-4-2) 4 kV contact for each terminal EFT (IEC 61000-4-4) ±2 kV for power Power Requirements ±2 kV for power Powerse Polarity Yes Protection Yes, 10 to 30 Vdc 12 to 48 Vdc Powered from Yes, IEEE Yes, IEEE			3750 Vrms
ESD (IEC 61000-4-2) 4 kV contact for each terminal EFT (IEC 61000-4-4) ±2 kV for power Power Requirements Yes Powered Polarity Yes, Powered from Yes, Terminal Block 10 to 30 Vdc Powered from Yes, IEEE			
EFT (IEC 61000-4-4) ±2 kV for power Power Requirements Powerse Polarity Protection Yes, Powered from Yes, Terminal Block 10 to 30 Vdc Powered from Yes, IEEE		4 kV contact for	or each terminal
Power Requirements Reverse Polarity Protection Powered from Terminal Block Powered from Poes Yes, Yes, 10 to 30 Vdc Yes, IEEE			
Reverse Polarity Protection Yes Powered from Terminal Block Yes, 10 to 30 Vdc Yes, 12 to 48 Vdc Powered from Terminal Block Yes, 10 to 30 Vdc Yes, 12 to 48 Vdc			or power
Protection Yes Powered from Yes, Yes, Terminal Block 10 to 30 Vdc 12 to 48 Vdc Powered from BoE Yes, IEEE			
Terminal Block 10 to 30 Vdc 12 to 48 Vdc Poworad from BoE Yes, IEEE		Y	és
Powered from PoE	Powered from	Yes,	Yes,
	Terminal Block	10 to 30 Vdc	
	Powered from PoE	_	
802.3af, class1		802.3af, class	
Consumption 2.4 W 3.0 W	Consumption	2.4 W	3.0 W
Mechanical	Mechanical		
Dimensions 72 x 123 x 35 mm		72 x 123 x 35 mm	
(W x L x D) (2.83 x 4.84 x 1.37")			
Installation DIN-rail or wall mounting	Installation		
Environment	Environment		
Operating 25 to 75°C (12 to 167°E)	Operating	DE to ZEOC	(12 to 167°E)
Temperature -25 to 75°C (-13 to 167°F)	Temperature	-25 to 75°C (-13 to 167°F)	
Storage Temperature -30 to 80°C (-22 to 176°F)	Storage Temperature	-30 to 80°C (-22 to 176°F)	
Humidity 10 to 90% RH, non-condensing			

Pin Assignments



I/O Specifications

Models		OME-ET-7050 OME-PET-7050	
Digital Inp	ut/Counter		
Channels		1	2
Contact		Wet c	ontact
Sink/Sour	ce (NPN/PNP)	Sink/s	source
On Voltage	e Level	10 to 5	50 Vdc
Off Voltage	e Level	4 Vdc m	aximum
Input Impe	edance	10	kΩ
	Maximum Count	4,294,967,2	285 (32 bits)
Counters	Maximum Input Frequency	500 Hz	
	Minimum Pulse Width	1 ms	
Overvoltage Protection		70 \	Vdc
Digital Out	tput		
Channels		6	
Туре			en collector
Sink/Sour	ce (NPN/PNP)	Sink	
Maximum Load Current		100 mA/channel at 25°C (77°F) Direct drive power relay module	
Load Voltage		5 to 30 Vdc	
Overvoltage Protection		—	60 Vdc
Overload I	Overload Protection		1.3 A
Short-circuit Protection			Yes
Power-on	Value	Yes, programmable	
Safe Value		Yes, programmable	

Model No.	Description	
OME-ET-7050	12-channel DI and 6-channel DO module	
OME-PET-7050	12-channel DI and 6-channel DO module with PoE	
RAIL-35-1	35 mm (1.4") DIN rail, 1 m (3.3') length	
iDRN-PS-1000	DIN rail power supply, 95 to 240 Vac input, 24 Vdc output at 850 mA	
OM-ESW-105	5 5-port unmanaged ethernet switch	
OM-ESW-105-POE	5-port POE ethernet switch (four 10/100 base TX ports with POE and one 10/100 base TX uplink port)	

Comes complete with wall mount bracket, quick start guide, utility software and operator's manual on CD. Ordering Example: OME-ET-7050 12-channel DI and 6-channel DO module and OCW-1 OMEGACARESM extends standard 1-year warranty to a total of 2 years.

16-Channel Isolated Digital Input Modules

OME-ET-7051/OME-PET-7051



- Built-In Web Server
- 🛩 Web HMI
- ✓ Support for Both MODBUS[®] TCP and MODBUS UDP Protocols
- Communication Security
- Dual Watchdog
- ✓ Wide Operating Temperature Range: -25 to 75°C (-13 to 167°F)
- I/O Pair Connection
- ✓ Built-In I/O
 - DI/Counter: 16 Channels

Applications

- Building Automation
- ✓ Factory Automation
- Machine Automation
- ✓ Remote Maintenance
- Remote Diagnosis
- Testing Equipment

The OME-ET-7051/OME-PET-7051 is a web-based Ethernet digital input module that features a built-in web server which allows configuration, I/O monitoring and I/O control by simply using a web browser. Using the web HMI function, no more programming or HTML skills are required. The user can create dynamic and attractive web pages easily. The module offers easy and safe access for users at anytime and from any location. It also supports MODBUS TCP protocol that makes perfect integration to SCADA software. The module provides 16 wet contact digital input channels. Each input channel can be used as a 32-bit counter. It features optical isolation for 3750 Vrms of transient overvoltage protection but doesn't provide channel-to-channel isolation. It can safely be used in applications where hazardous voltages are present.

<image>

Shown actual size.

Wire Connections

Digital Input/Counter	Readback as 1	Readback as 0
	10 to 50 Vdc	Open or < 4 Vdc
Sink	INX 10K →	INx 10K
	10 to 50 Vdc	Open or < 4 Vdc
Source	INX 10K INX INX INX INK INA INX INX INK INK INA INX INK INK INK INA INX INK INK INK INA INX INK INK INK INA INX INK INK INK INK INA INX INK	INX 10K INX 10K To ther IN.COM



System Specifications

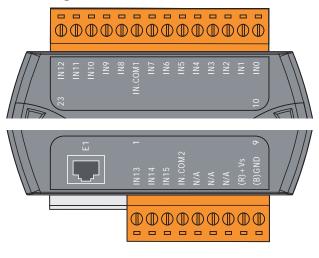
NEW

Madala		
Models	OME-E1-7051	OME-PET-7051
Software		
Built-in Web Server	Yes	
Web HMI		es
I/O Pair Connection	Ye	es
Communication	-	
Ethernet Port		K with auto MDI/ DI-X
PoE	—	Yes
Protocol	MODBUS TCP,	MODBUS UDP
Security		d and IP filter
Dual Watchdog	Yes, module ((0.8 seconds),
Dual watchuog	communication	(programmable)
LED Indicators		
L1 (System Running)	Ye	es
L2 (Ethernet Link/Act)	Ye	es
L3 (Ethernet	V	00
10/100 M Speed)	Yes	
PoE Power	— Yes	
2-Way Isolation		
Ethernet	1500 Vdc	—
I/O	3750 Vrms	3750 Vrms
EMS Protection		
ESD (IEC 61000-4-2)	4 kV contact fo	r each terminal
EFT (IEC 61000-4-4)	±2 kV fo	or power
Power Requirements		
Reverse Polarity Protection	Ye	es
Powered from	Yes,	Yes,
Terminal Block	10 to 30 Vdc	12 to 48 Vdc
Developed from Do F		Yes, IEEE
Powered from PoE		802.3af, class1
Consumption	2.4 W	3.0 W
Mechanical		
Dimensions	72 x 123	x 35 mm
(W x L x D)	(2.83 x 4.84 x 1.37")	
Installation	DIN-rail or wall mounting	
Environment		
Operating	-25 to 75°C (-13 to 167°F)	
Temperature		
Storage Temperature	-30 to 80°C (-22 to 176°F)	
Humidity	10 to 90% RH, non-condensing	

I/O Specifications

Digital Input/Counter		
Channels		16
Contact		Wet contact
Sink/Source	e (NPN/PNP)	Sink/source
On Voltage	Level	10 to 50 Vdc
Off Voltage	e Level	4 Vdc maximum
Input Impedance 10 kΩ		10 kΩ
	Maximum Count	4,294,967,285 (32 bits)
Counters	Maximum Input Frequency	500 Hz
	Minimum Pulse Width	1 ms
Overvoltage Protection 70 Vdc		70 Vdc

Pin Assignments



To Order Visit omega.com/ome-et-7000_ome-pet-7000 for Pricing and Details

Model No.	Description
OME-ET-7051	16-channel isolated digital input module
OME-PET-7051	16-channel isolated digital input module with PoE
RAIL-35-1	35 mm (1.4") DIN rail, 1 m (3.3') length
iDRN-PS-1000	DIN rail power supply, 95 to 240 Vac input, 24 Vdc output at 850 mA
OM-ESW-105	5-port unmanaged ethernet switch
OM-ESW-105-POE	5-port POE ethernet switch (four 10/100 base TX ports with POE and one 10/100 base TX uplink port)

Comes complete with wall mount bracket, quick start guide, utility software and operator's manual on CD.

Ordering Example: OME-ET-7051 16-channel isolated digital input module and OCW-1 OMEGACARESM extends standard 1-year warranty to a total of 2 years.

8-Channel DI and 8-Channel DO Modules

OME-ET-7052/OME-PET-7052



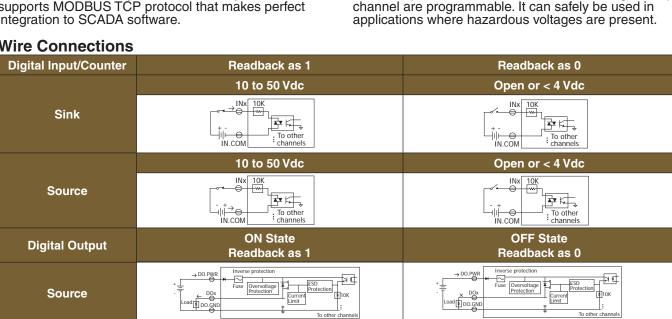
- Built-In Web Server
- Web HMI
- Support for Both MODBUS® TCP and MODBUS UDP Protocols
- Communication Security
- Dual Watchdog
- ✓ Wide Operating Temperature Range: -25 to 75°C (-13 to 167°F)
- ✓ I/O Pair Connection
- Built-In I/O
 - DI/Counter: 8 Channels
 - DO: 8 Channels

Applications

- Building Automation
- ✓ Factory Automation
- Machine Automation
- Remote Maintenance
- Remote Diagnosis
- Testing Equipment

The OME-ET-7052/OME-PET-7052 is a web-based Ethernet digital I/O module that features a built-in web server which allows configuration, I/O monitoring and I/O control by simply using a web browser. Using the web HMI function, no more programming or HTML skills are required. The user can create dynamic and attractive web pages easily. The module offers easy and safe access for users at anytime and from any location. It also supports MODBUS TCP protocol that makes perfect integration to SCADA software.

Wire Connections





The module provides 8 wet contact digital input channels and 8 source-type digital output channels. It features optical isolation for 3750 Vrms of transient overvoltage protection but doesn't provide channel-to-channel isolation. Each input channel can be used as a 32-bit counter and each output channel can drive 650 mA load. The power-on value and safe value of digital output channel are programmable. It can safely be used in

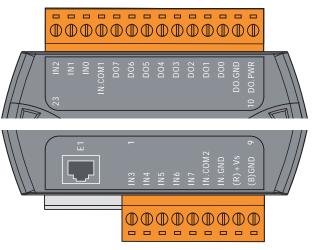
System Specifications

ModelsOME-ET-7052OME-PET-7052SoftwareBuilt-in Web ServerWeb HMIYesVO Pair ConnectionCommunicationEthernet Port10/100 base-TX with auto MDI/MDI-XPoEPoEPotocolMODBUS TCP, MODBUS UDPSecurityID, password and IP filterDual Watchdogcommunication (programmable)LED IndicatorsL1 (System Running)YesL2 (Ethernet Link/Act)YesPoE Power2-Way IsolationEthernet1500 VdcPoE Power2-Way IsolationEthernetEthernet1003750 Vrms3750 VrmsEMS ProtectionESD (IEC 61000-4-2)4 kV contact for each terminalETT (IEC 61000-4-4)±2 kV for powerPowered from PoEPowered from PoEPowered from PoEDimensions72 x 123 x 35 mm (W x L x D)(2.83 x 4.84 x 1.37")InstallationDIN-rail or wall mountingEnvironmentOperating Temperature-25 to 75°C (-13 to 167°F)Storage Temperature-30 to 80°C (-22 to 176°F)Humidity10 to 90% RH, non-condensing	System Specificat		
Built-in Web Server Yes Web HMI Yes I/O Pair Connection Yes Communication 10/100 base-TX with auto MDI/MDI-X Ethernet Port 10/100 base-TX with auto MDI/MDI-X PoE — Yes Protocol MODBUS TCP, MODBUS UDP Security ID, password and IP filter Dual Watchdog Yes, module (0.8 seconds), communication (programmable) LED Indicators		OME-ET-7052	OME-PET-7052
Web HMIYesI/O Pair ConnectionYesCommunication10/100 base-TX with auto MDI/MDI-XPoE—YesProtocolMODBUS TCP, MODBUS UDPSecurityID, password and IP filterDual WatchdogYes, module (0.8 seconds), communication (programmable)LED IndicatorsYesL1 (System Running)YesL2 (Ethernet Link/Act)YesPoE Power—YesYes2-Way IsolationYesEthernet1500 VdcVO3750 VrmsBSP (IEC 61000-4-2)4 kV contact for each terminalEFT (IEC 61000-4-2)4 kV contact for powerPower RequirementsYes, 12 to 48 VdcReverse Polarity ProtectionYes, 12 to 48 VdcPowered from PoE—Yes, 12 to 33 to 80 WMechanicalDIN-rail or wall mountingDin-rail or wall mountingDIN-rail or wall mountingEnvironment25 to 75°C (-13 to 167°F)Storage Temperature-30 to 80°C (-22 to 176°F) </th <th></th> <th></th> <th></th>			
I/O Pair ConnectionYesCommunication10/100 base-TX with auto MDI/MDI-XPoE—YesProtocolMODBUS TCP, MODBUS UDPSecurityID, password and IP filterDual WatchdogYes, module (0.8 seconds), communication (programmable)LED IndicatorsIIL1 (System Running)YesL2 (Ethernet Link/Act)YesL3 (Ethernet 10/100 M Speed)YesPoE Power—Yes2-Way IsolationYesEthernet 10/100 M Speed)1500 VdcPoE Power—YO3750 VrmsST50 (IEC 61000-4-2)4 kV contact for each terminalEFT (IEC 61000-4-2)4 kV contact for each terminalEFT (IEC 61000-4-4)±2 kV for powerPower RequirementsYes, 10 to 30 VdcReverse Polarity ProtectionYes, 2.4 WPowered from Terminal BlockYes, 10 to 30 VdcPowered from PoE— (2.83 x 4.84 x 1.37")InstallationDIN-rail or wall mounting EnvironmentOperating Temperature-25 to 75°C (-13 to 167°F)Storage Temperature-30 to 80°C (-22 to 176°F)		Y	es
CommunicationEthernet Port10/100 base-TX with auto MDI/MDI-XPoE—YesProtocolMODBUS TCP, MODBUS UDPSecurityID, password and IP filterDual WatchdogYes, module (0.8 seconds), communication (programmable)LED Indicators		Y	es
Ethernet Port10/100 base-TX with auto MDI/MDI-XPoE—YesProtocolMODBUS TCP, MODBUS UDPSecurityID, password and IP filterDual WatchdogYes, module (0.8 seconds), communication (programmable)LED IndicatorsIIIL1 (System Running)YesL2 (Ethernet Link/Act)YesDower—YesYes2-Way IsolationYesEthernet1500 VdcIO/100 M Speed)YesPoE Power—YesYes2-Way IsolationEthernet1500 VdcIO3750 VrmsBMS ProtectionESD (IEC 61000-4-2)4 kV contact for each terminalEFT (IEC 61000-4-4) ± 2 kV for powerPower RequirementsReverse Polarity ProtectionYes, Yes, IEEE 802.3af, class1Powered from PoE—Powered from PoEYes, IEEE 802.3af, class1Consumption2.4 W3.0 WMechanicalDimensions72 x 123 x 35 mm (2.83 x 4.84 x 1.37")InstallationDIN-rail or wall mounting EnvironmentOperating Temperature-25 to 75°C (-13 to 167°F)Storage Temperature-30 to 80°C (-22 to 176°F)		Y	es
Ethernet Portwith auto MDI/MDI-XPoE—YesProtocolMODBUS TCP, MODBUS UDPSecurityID, password and IP filterDual WatchdogYes, module (0.8 seconds), communication (programmable)LED IndicatorsIt (System Running)L2 (Ethernet Link/Act)YesL3 (EthernetYes10/100 M Speed)YesPoE Power—YesYes2-Way IsolationYesEthernet1500 VdcI/O3750 VrmsBS ProtectionEthernetESD (IEC 61000-4-2)4 kV contact for each terminalEFT (IEC 61000-4-2)4 kV contact for each terminalEFT (IEC 61000-4-2)4 kV contact for each terminalPowered fromYes,Powered fromYes,Powered from PoE—Powered from PoEYes, IEEE 802.3af, class1Consumption2.4 W3.0 WMechanicalJinensionsDimensions72 x 123 x 35 mm (2.83 x 4.84 x 1.37")InstallationDIN-rail or wall mountingEnvironment-25 to 75°C (-13 to 167°F)Storage Temperature-30 to 80°C (-22 to 176°F)	Communication		
ProtocolMODBUS TCP, MODBUS UDPSecurityID, password and IP filterDual WatchdogYes, module (0.8 seconds), communication (programmable)LED IndicatorsIterL1 (System Running)YesL2 (Ethernet Link/Act)YesL3 (Ethernet 10/100 M Speed)YesPoE Power—Yey IsolationYesEthernet 10/01500 VdcPoE Power—YO3750 VrmsSPotectionSTS0 VrmsEMS ProtectionIterminalEFT (IEC 61000-4-2)4 kV contact for each terminalEFT (IEC 61000-4-2)4 kV contact for powerPower RequirementsYesReverse Polarity ProtectionYes, 10 to 30 VdcPowered from Terminal BlockYes, 10 to 30 VdcPowered from PoE—Consumption2.4 W2.4 W3.0 WMechanicalT2 x 123 x 35 mm (2.83 x 4.84 x 1.37")Dimensions (W x L x D)72 x 123 x 35 mm (2.83 x 4.84 x 1.37")InstallationDIN-rail or wall mountingEnvironment-25 to 75°C (-13 to 167°F)Operating Temperature-30 to 80°C (-22 to 176°F)	Ethernet Port		
SecurityID, password and IP filterDual WatchdogYes, module (0.8 seconds), communication (programmable)LED IndicatorsYesL1 (System Running)YesL2 (Ethernet Link/Act)YesDog Power-YesYesPoE Power-YesYes2-Way IsolationYesEthernet1500 VdcI/O3750 VrmsBS ProtectionESD (IEC 61000-4-2)4 kV contact for each terminalEFT (IEC 61000-4-4)±2 kV for powerPower RequirementsReverse Polarity ProtectionYesPowered from Terminal BlockYes, 12 to 48 VdcPowered from PoE-Yes, 12 to 48 VdcPowered from PoEYes, 12 to 48 VdcPowered from PoEYes, 12 to 48 VdcPowered from PoE-MechanicalDimensions72 x 123 x 35 mm (2.83 x 4.84 x 1.37")InstallationDIN-rail or wall mountingEnvironmentOperating -25 to 75°C (-13 to 167°F)Storage Temperature-30 to 80°C (-22 to 176°F)	PoE	—	Yes
Dual WatchdogYes, module (0.8 seconds), communication (programmable)LED IndicatorsYesL1 (System Running)YesL2 (Ethernet Link/Act)YesL3 (Ethernet 10/100 M Speed)YesPoE Power—YesYesPoE Power—YesYesPoE Power—YesYesPoE Power—YesYesPoE Power—YesYesPoE Power—YesYesPotectionEthernetEMS Protection±2 kV for powerPower RequirementsReverse Polarity ProtectionYesPowered from Terminal BlockYes, 12 to 48 VdcPowered from PoE—Yes, 12 to 48 VdcPowered from PoE—Yes, 12 to 3.0 WMechanicalDimensions (W x L x D)T2 x 123 x 35 mm (2.83 x 4.84 x 1.37")InstallationDIN-rail or wall mounting EnvironmentOperating Temperature-25 to 75°C (-13 to 167°F)Storage Temperature-30 to 80°C (-22 to 176°F)	Protocol	MODBUS TCP,	MODBUS UDP
Dual watchdogcommunication (programmable)LED IndicatorsL1 (System Running)YesL2 (Ethernet Link/Act)YesL3 (EthernetYes10/100 M Speed)YesPoE Power—Yes2-Way IsolationEthernet1500 VdcI/O3750 VrmsBS ProtectionESD (IEC 61000-4-2)EMS ProtectionEFT (IEC 61000-4-4) ± 2 kV for powerPower RequirementsReverse PolarityProtectionPowered from Terminal BlockPowered from PoE—Yes, IEEE 802.3af, class1Consumption2.4 W3.0 WMechanicalDimensions $72 \times 123 \times 35$ mm (W x L x D)InstallationDIN-rail or wall mountingEnvironmentOperating Temperature-25 to 75° C (-13 to 167° F)Storage Temperature-30 to 80° C (-22 to 176° F)	Security	ID, password	d and IP filter
L1 (System Running)YesL2 (Ethernet Link/Act)YesL3 (Ethernet 10/100 M Speed)YesPoE Power—YesYes2-Way Isolation1500 VdcEthernet1500 VdcI/O3750 Vrms3750 Vrms3750 VrmsEMS Protection1500 VdcESD (IEC 61000-4-2)4 kV contact for each terminalEFT (IEC 61000-4-2)4 kV contact for powerPower RequirementsYesPowered from Terminal BlockYes, 12 to 48 VdcPowered from PoE—Yes, IEEE 802.3af, class1Consumption2.4 W3.0 WMechanicalDimensions (W x L x D) TemperatureOperating Temperature-25 to 75°C (-13 to 167°F)Storage Temperature-30 to 80°C (-22 to 176°F)	Dual Watchdog		
L2 (Ethernet Link/Act)YesL3 (Ethernet 10/100 M Speed)YesPoE Power—YesYes2-Way Isolation1500 VdcEthernet1500 VdcI/O3750 Vrms3750 Vrms3750 VrmsEMS Protection $\pm 2 kV \text{ contact for each terminal}$ EFT (IEC 61000-4-2)4 kV contact for each terminalEFT (IEC 61000-4-4) $\pm 2 kV \text{ for power}$ Power RequirementsYes,Powered from Terminal BlockYes,Powered from PoE—Yes, IEEE 802.3af, class1Consumption2.4 W2.4 W3.0 WMechanicalDimensions (W x L x D) Temperature72 x 123 x 35 mm (2.83 x 4.84 x 1.37")InstallationDIN-rail or wall mountingEnvironment-25 to 75°C (-13 to 167°F)Storage Temperature-30 to 80°C (-22 to 176°F)	LED Indicators	-	
L3 (Ethernet 10/100 M Speed)YesPoE Power—Yes2-Way IsolationEthernet1500 VdcEthernet1500 Vdc—I/O3750 Vrms3750 VrmsEMS ProtectionESD (IEC 61000-4-2)4 kV contact for each terminalEFT (IEC 61000-4-2)4 kV contact for powerPower Requirements ± 2 kV for powerPowered from Terminal BlockYes, 10 to 30 VdcYes, 12 to 48 VdcPowered from PoE—Yes, IEEE 802.3af, class1Consumption2.4 W3.0 WMechanical $72 \times 123 \times 35$ mm ($W \times L \times D$)T2 x 123 x 35 mm ($2.83 \times 4.84 \times 1.37"$)InstallationDIN-rail or wall mountingEnvironment -25 to 75° C (-13 to 167° F)Storage Temperature-30 to 80° C (-22 to 176° F)			
10/100 M Speed)TesPoE Power—Yes2-Way IsolationEthernet1500 VdcI/O3750 VrmsSPOtectionESD (IEC 61000-4-2)4 kV contact for each terminalEFT (IEC 61000-4-2)4 kV contact for powerPower RequirementsReverse PolarityYesPowered from Terminal BlockYes, 10 to 30 VdcPowered from PoE—Powered from PoEYes, IEEE 802.3af, class1Consumption2.4 W3.0 WMechanicalDimensions (W x L x D) Tenying Temperature-25 to 75°C (-13 to 167°F)Storage Temperature-30 to 80°C (-22 to 176°F)		Y	es
2-Way IsolationEthernet 1500 Vdc —I/O 3750 Vrms 3750 Vrms EMS ProtectionESD (IEC 61000-4-2) $4 \text{ kV contact for each terminal}$ EFT (IEC 61000-4-2) $4 \text{ kV contact for power}$ Power Requirements $\pm 2 \text{ kV for power}$ Power Requirements Yes ,Powered fromYes,Powered from PoE—Powered from PoE—Ves, IEEE802.3af, class1Consumption 2.4 W 3.0 WMechanicalDimensions $72 \times 123 \times 35 \text{ mm}$ ($2.83 \times 4.84 \times 1.37^{"}$)InstallationDIN-rail or wall mountingEnvironment $-25 \text{ to } 75^{\circ}C (-13 \text{ to } 167^{\circ}F)$ Storage Temperature $-30 \text{ to } 80^{\circ}C (-22 \text{ to } 176^{\circ}F)$	L3 (Ethernet 10/100 M Speed)	Yes	
Ethernet 1500 Vdc I/O 3750 Vrms 3750 Vrms EMS Protection $4 \text{ kV contact for each terminal}$ ESD (IEC 61000-4-2) $4 \text{ kV contact for power}$ Power Requirements $\pm 2 \text{ kV for power}$ Power Requirements Yes ,Powered fromYes,Powered from PoEPowered from PoEPowered from PoEVes, IEEE802.3af, class1Consumption 2.4 W 3.0 WMechanicalDimensions $72 \times 123 \times 35 \text{ mm}$ ($2.83 \times 4.84 \times 1.37"$)InstallationDIN-rail or wall mountingEnvironment $-25 \text{ to } 75^{\circ}\text{C} (-13 \text{ to } 167^{\circ}\text{F})$ Storage Temperature $-30 \text{ to } 80^{\circ}\text{C} (-22 \text{ to } 176^{\circ}\text{F})$	PoE Power	—	Yes
I/O 3750 Vrms 3750 Vrms EMS Protection $4 \text{ kV contact for each terminal}$ ESD (IEC 61000-4-2) $4 \text{ kV contact for each terminal}$ EFT (IEC 61000-4-4) $\pm 2 \text{ kV for power}$ Power Requirements Yes Powered fromYes, 12 to 48 VdcPowered from PoEPowered from PoEYes, 12 to 48 VdcPowered from PoEVes, IEEE802.3af, class1Consumption 2.4 W 30 WMechanicalDimensions $72 \times 123 \times 35 \text{ mm}$ ($2.83 \times 4.84 \times 1.37"$)InstallationDIN-rail or wall mountingEnvironment-25 to $75^{\circ}C$ (-13 to $167^{\circ}F$)Operating Temperature-30 to $80^{\circ}C$ (-22 to $176^{\circ}F$)	2-Way Isolation		
EMS ProtectionESD (IEC 61000-4-2)4 kV contact for each terminalEFT (IEC 61000-4-4) ± 2 kV for powerPower Requirements ± 2 kV for powerPowere RequirementsYesPowered fromYes,Powered from PoE-Powered from PoE-Powered from PoE-Storauption2.4 WStorage Temperature-25 to 75°C (-13 to 167°F)Storage Temperature-30 to 80°C (-22 to 176°F)	Ethernet	1500 Vdc	—
ESD (IEC 61000-4-2)4 kV contact for each terminal ± 2 kV for powerPower Requirements ± 2 kV for powerPowere RequirementsYesPowered from Terminal BlockYes, 10 to 30 VdcYes, 12 to 48 VdcPowered from PoEYes, IEEE 802.3af, class1Consumption2.4 W3.0 WMechanicalT2 x 123 x 35 mm (U x L x D)T2 x 123 x 35 mm (2.83 x 4.84 x 1.37")InstallationDIN-rail or wall mountingEnvironment-25 to 75°C (-13 to 167°F)Operating Temperature-30 to 80°C (-22 to 176°F)	I/O	3750 Vrms	3750 Vrms
EFT (IEC 61000-4-4) ±2 kV for power Power Requirements Yes Reverse Polarity Yes, 10 to 30 Vdc Yes, 12 to 48 Vdc Powered from Terminal Block Yes, 10 to 30 Vdc Yes, 12 to 48 Vdc Powered from PoE Yes, IEEE 802.3af, class1 Consumption 2.4 W 3.0 W Mechanical 72 x 123 x 35 mm (2.83 x 4.84 x 1.37") Installation Dimensions (W x L x D) 72 x 123 x 35 mm (2.83 x 4.84 x 1.37") Powenting Environment Operating -25 to 75°C (-13 to 167°F) -30 to 80°C (-22 to 176°F)	EMS Protection		
Power RequirementsReverse Polarity ProtectionYesPowered from Terminal BlockYes, 10 to 30 VdcYes, 12 to 48 VdcPowered from PoE—Yes, IEEE 802.3af, class1Consumption2.4 W3.0 WMechanicalT2 x 123 x 35 mm (U x L x D)T2 x 123 x 35 mm (2.83 x 4.84 x 1.37")InstallationDIN-rail or wall mountingEnvironment-25 to 75°C (-13 to 167°F) TemperatureStorage Temperature-30 to 80°C (-22 to 176°F)		4 kV contact fo	or each terminal
Reverse Polarity ProtectionYesPowered from Terminal BlockYes, 10 to 30 VdcYes, 	EFT (IEC 61000-4-4)	±2 kV for power	
ProtectionYesPowered from Terminal BlockYes, 10 to 30 VdcYes, 12 to 48 VdcPowered from PoE—Yes, IEEE 802.3af, class1Consumption2.4 W3.0 WMechanical	Power Requirements		
Terminal Block 10 to 30 Vdc 12 to 48 Vdc Powered from PoE Yes, IEEE 802.3af, class1 Consumption 2.4 W 3.0 W Mechanical (2.83 x 4.84 x 1.37") Dimensions 72 x 123 x 35 mm (2.83 x 4.84 x 1.37") Installation DIN-rail or wall mounting Environment Operating Temperature Storage Temperature		Y	es
Powered from PoE — Yes, IEEE 802.3af, class1 Consumption 2.4 W 3.0 W Mechanical			
Powered from PoE — 802.3af, class1 Consumption 2.4 W 3.0 W Mechanical	Terminal Block	10 to 30 Vdc	
MechanicalDimensions72 x 123 x 35 mm (2.83 x 4.84 x 1.37")InstallationDIN-rail or wall mountingEnvironmentOperating Temperature-25 to 75°C (-13 to 167°F)Storage Temperature-30 to 80°C (-22 to 176°F)	Powered from PoE	_	
Dimensions (W x L x D)72 x 123 x 35 mm (2.83 x 4.84 x 1.37")InstallationDIN-rail or wall mountingEnvironment-25 to 75°C (-13 to 167°F)Operating Temperature-30 to 80°C (-22 to 176°F)		2.4 W	3.0 W
(W x L x D)(2.83 x 4.84 x 1.37")InstallationDIN-rail or wall mountingEnvironmentOperating Temperature-25 to 75°C (-13 to 167°F)Storage Temperature-30 to 80°C (-22 to 176°F)			
Installation DIN-rail or wall mounting Environment Operating Operating -25 to 75°C (-13 to 167°F) Temperature -30 to 80°C (-22 to 176°F)			
Environment Operating Temperature Storage Temperature -25 to 75°C (-13 to 167°F) -30 to 80°C (-22 to 176°F)			
Operating Temperature-25 to 75°C (-13 to 167°F)Storage Temperature-30 to 80°C (-22 to 176°F)		DIN-rail or wall mounting	
Temperature -25 to 75 C (-13 to 167 F) Storage Temperature -30 to 80°C (-22 to 176°F)			
Humidity 10 to 90% RH, non-condensing		-30 to 80°C (-22 to 176°F)	
	Humidity	10 to 90% RH, non-condensing	

I/O Specifications

Digital Input/Counter			
Channels		8	
Contact		Wet contact	
Sink/Source (NPN/PNP)		Sink/source	
On Voltage Level		10 to 50 Vdc	
Off Voltage	e Level	4 Vdc maxmium	
Input Impe	edance	10 kΩ	
	Maximum Count	4,294,967,285 (32 bits)	
Counters	Maximum Input Frequency	500 Hz	
	Minimum Pulse Width	1 ms	
Overvoltage Protection		70 Vdc	
Digital Output			
Channels		8	
Туре		Isolated open collector	
Sink/Sour	ce (NPN/PNP)	Source	
Max. Load Current		650 mA/channel at 25°C	
Load Voltage		10 to 40 Vdc	
Overvoltage Protection		47 Vdc	
Overload Protection			
Short-circuit Protection		Yes	
Power-on Value		Yes, programmable	
Safe Value		Yes, programmable	

Pin Assignments



To Order Visit omega.com/ome-et-7000_ome-pet-7000 for Pricing and Details

Model No.	Description	
OME-ET-7052	8-channel DI and 8-channel DO module	
OME-PET-7052	8-channel DI and 8-channel DO module with PoE	
RAIL-35-1	35 mm (1.4") DIN rail, 1 m (3.3') length	
iDRN-PS-1000	DIN rail power supply, 95 to 240 Vac input, 24 Vdc output at 850 mA	
OM-ESW-105 5-port unmanaged ethernet switch		
OM-ESW-105-POE	5-port POE ethernet switch (four 10/100 base TX ports with POE and one 10/100 base TX uplink port)	

Comes complete with wall mount bracket, quick start guide, utility software and operator's manual on CD. Ordering Example: OME-ET-7052 8-channel DI and 8-channel DO module and OCW-1 OMEGACARE[™] extends standard 1-year warranty to a total of 2 years.







- Built-In Web Server
- 🛩 Web HMI
- Support for Both MODBUS® TCP and MODBUS UDP Protocols
- Communication Security
- Dual Watchdog
- Wide Operating Temperature Range: -25 to 75°C (-13 to 167°F)
- ✓ I/O Pair Connection
- ✓ Built-In I/O
 - DI/Counter: 16 Channels

Applications

- Building Automation
- ✓ Factory Automation
- Machine Automation
- Remote Maintenance
- Remote Diagnosis
- Testing Equipment



The OME-ET-7053/OME-PET-7053 is a web-based Ethernet digital input module that features a built-in web server which allows configuration, I/O monitoring and I/O control by simply using a web browser. Using the web HMI function, no more programming or HTML skills are required. The user can create dynamic and attractive web pages easily. The module offers easy and safe access for users at anytime and from any location. It also supports MODBUS TCP protocol that makes perfect integration to SCADA software.

The module provides 16 dry contact digital input channels. Each input channel can be used as a 32-bit counter. It features optical isolation for 3750 Vrms of transient overvoltage protection but doesn't provide channel-to-channel isolation. It can safely be used in applications where hazardous voltages are present.

Wire Connections

Digital Input/Counter	ON State Readback as 1	OFF State Readback as 0
Dry Contact	× Relay Open	↑ Relay Close

NEW

DATA ACQUISITION SYSTEMS

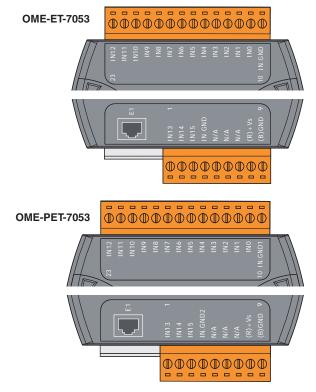
System Specifications

System Specificat		
Models Software	OME-E1-7053	OME-PET-7053
Built-in Web Server	,	Yes
		Yes
Web HMI		
I/O Pair Connection		Yes
Communication	10/100 b	aga TV with
Ethernet Port		ase-TX with DI/MDI-X
PoE		Yes
Protocol		P, MODBUS UDP
Security		rd and IP filter
Dual Watchdog	Yes, N (0.8 seconds) (progra	IODULE , communication ammable)
LED Indicators		
L1 (System Running)	``````````````````````````````````````	Yes
L2 (Ethernet Link/Act)	``````````````````````````````````````	Yes
L3 (Ethernet		Yes
10/100 M Speed)		
PoE Power		Yes
2-Way Isolation	1	
Ethernet	1500 Vdc	—
I/O	3750 Vrms	3750 Vrms
EMS Protection		
ESD (IEC 61000-4-2)		or each terminal
EFT (IEC 61000-4-4)	±2 kV	for power
Power Requirements		
Reverse Polarity Protection	,	Yes
Powered from	Yes,	Yes,
Terminal Block	10 to 30 Vdc	12 to 48 Vdc
Powered from PoE	_	Yes, IEEE 802.3af, class1
Consumption	2.4 W	3.0 W
Mechanical		
Dimensions	72 x 12	3 x 35 mm
(W x L x D)	(2.83 x 4.84 x 1.37")	
Installation	DIN-rail or wall mounting	
Environment		
Operating Temperature	-25 to 75°C	(-13 to 167°F)
Storage Temperature	-30 to 80°C (-22 to 176°F)	
Humidity	, , , , , , , , , , , , , , , , , , ,	
Humany	10 to 90% RH, non-condensing	

I/O Specifications

Digital Input/Counter		
Channels		16
Contact		Dry contact
Sink/Sour	ce (NPN/PNP)	Source
On Voltage Level		Open
Off Voltage	e Level	Close to GND
	Maximum Count	4,294,967,285 (32 bits)
Counters	Maximum Input Frequency	500 Hz
	Minimum Pulse Width	1 ms
Overvoltage Protection		_
Effective Distance		500 M maximum

Pin Assignments



To Order Visit omega.com/ome-et-7000_ome-pet-7000 for Pricing and Details

Model No.	Description
OME-ET-7053	16-channel isolated digital input module
OME-PET-7053	16-channel isolated digital input module with PoE
RAIL-35-1	35 mm (1.4") DIN rail, 1 m (3.3') length
iDRN-PS-1000	DIN rail power supply, 95 to 240 Vac input, 24 Vdc output at 850 mA
OM-ESW-105	5-port unmanaged ethernet switch
OM-ESW-105-POE	5-port POE ethernet switch (four 10/100 base TX ports with POE and one 10/100 base TX uplink port)

Comes complete with wall mount bracket, quick start guide, utility software and operator's manual on CD. Ordering Example: OME-ET-7053 16-channel isolated digital input module and OCW-1 OMEGACARESM extends standard 1-year warranty to a total of 2 years.

6-Channel Power Relay Output and DI Modules

OME-ET-7060/OME-PET-7060



- Built-In Web Server
- 🛩 Web HMI
- Support for Both MODBUS® TCP and MODBUS UDP Protocols
- Communication Security
- Dual Watchdog
- ✓ Wide Operating Temperature Range: -25 to 75°C (-13 to 167°F)
- I/O Pair Connection
- ✓ Built-In I/O
 - DI/Counter: 6 Channels
 - Power Relay: 6 Channels

Applications

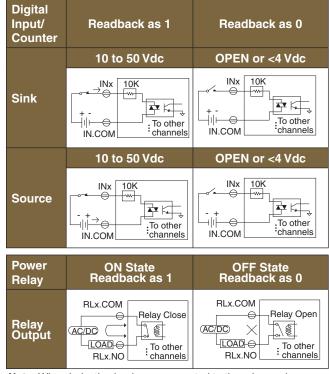
- Building Automation
- Factory Automation
- Machine Automation
- ✓ Remote Maintenance
- ✓ Remote Diagnosis
- ✓ Testing Equipment

OME-ET-7060/OME-PET-7060 is a web-based ethernet digital I/O module that features a built-in web server which allows configuration, I/O monitoring and I/O control by simply using a web browser. Using the web HMI function, no more programming or HTML skills are required. The user can create dynamic and attractive web pages easily. The module offers easy and safe access for users at anytime and from any location. It also supports MODBUS TCP protocol that makes perfect integration to SCADA software.

The module provides 6 wet contact digital input channels and 6 form A electromechanical relays. It features optical isolation for 3000 Vrms of transient overvoltage protection and doesn't have channel-to-channel isolation. Each input channel can be used as a 32-bit counter. The power-on value and safe value of relay are programmable.

the second secon

Wire Connections



Note: When inductive loads are connected to the relays, a large counter electromotive force may occur when the relay actuates because of the energy stored in the load. These flyback voltages can severely damage the relay contacts and greatly shorten the relay life. Limit these flyback voltages at your inductive load by installing a flyback diode for DC loads or a metal oxide varistor for AC loads.

System Specifications

System Specificat		
Models	OME-ET-7060	OME-PET-7060
Software		
Built-in Web Server	Yes	
Web HMI	Yes	
I/O Pair Connection	Y	/es
Communication		
Ethernet Port		X with auto MDI/ DI-X
PoE		Yes
Protocol	MODBUS TCP	, MODBUS UDP
Security		d and IP filter
Dual Watchdog		(0.8 seconds),
	communication	(programmable)
LED Indicators		
L1 (System Running)		/es
L2 (Ethernet Link/Act)	Yes	
L3 (Ethernet 10/100 M Speed)	Yes	
PoE Power		Yes
2-Way Isolation		
Ethernet	1500 Vdc	
I/O	3000 Vrms	3000 Vrms
EMS Protection		
ESD (IEC 61000-4-2)	4 kV contact for each terminal	
EFT (IEC 61000-4-4)	±2 kV for power	
Power Requirements		
Reverse Polarity	Yes	
Protection		
Powered from	Yes,	Yes,
Terminal Block	10 to 30 Vdc	12 to 48 Vdc
Powered from PoE		Yes, IEEE
Concumption	2.9 W	802.3af, class1 3.5 W
Consumption Mechanical	2.9 VV	3.5 VV
Dimensions	72 y 103	3 x 35 mm
(W x L x D)	72 x 123 x 35 mm (2.83 x 4.84 x 1.37")	
Installation	DIN-rail or wall mounting	
Environment		
Operating		· · · · · · · · · · · · · · · · · · ·
Temperature	-25 to 75°C (-13 to 167°F)	
Storage Temperature	-30 to 80°C (-22 to 176°F)	
Humidity	10 to 90% RH, non-condensing	
Pin Assignments		

I/O Specifications

Digital Input	t/Co	unter	
Channels			6
Contact			Wet contact
Sink/Source	e (NF	N/PNP)	Sink/source
On Voltage I	Leve		10 to 50 Vdc
Off Voltage I	Leve		4 Vdc maximum
Input Imped	anc	9	10 kΩ
	Max Cou	kimum unt	4,294,967,285 (32 bits)
Counters	Maximum counters Input Frequency		500 Hz
	Pul	imum se Width	1 ms
Overvoltage		tection	70 Vdc
Power Relay	/		
Channels			6
Туре			Power relay, form A (SPST N.O.)
Operating Voltage Range		ge Range	250 Vac/30 Vdc
Maximum Load Current		Current	5.0A/channel at 25°C
Operate Tim	e		6 ms (typical)
Release Time			3 ms (typical)
		VDE	5A 250 Vac 30,000 ops
			(10 ops/minute) at 75°C
Electrical Li (Resistive	fe		5A 30 Vdc 70,000 ops (10 ops/minute) at 75°C
(Resistive			5A 250 Vac/30 Vdc 6,000 ops.
Load)		UL	3A 250 Vac/30 Vdc 0,000 0ps. 3A 250 Vac/30 Vdc 100,000 ops.
Mechanical	Life		20,000,000 ops. at no load (300 ops./minute)
Power-on Va	alue		Yes, programmable
Safe Value			Yes, programmable
For [DC lo	ads	For AC loads
		Diode	Varistor
Relay	ı	Load	Relay Varistor

Varistor Selection

Operating Voltage	Varistor Voltage	Maximum Peak Current
100 to 120 Vac	240 to 270 Vac	> 1000 A
200 to 240 Vac	440 to 470 Vac	> 1000 A

Description
6-channel power relay output and DI module
6-channel power relay output and DI module with PoE
35 mm (1.4") DIN rail, 1 m (3.3') length
DIN rail power supply, 95 to 240 Vac input, 24 Vdc output at 850 mA
5-port unmanaged ethernet switch
5-port POE ethernet switch (four 10/100 base TX ports with POE and one 10/100 base TX uplink port)
(() ()

Comes complete with wall mount bracket, quick start guide, utility software and operator's manual on CD. Ordering Example: OME-ET-7060 6-channel power relay output and DI module and OCW-1 OMEGACARESM extends standard 1-year warranty to a total of 2 years.

8-Channel Power Relay Output Modules

OME-ET-7067/OME-PET-7067

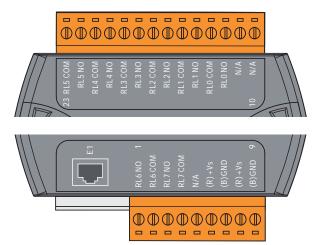
- Built-In Web Server
- 🛩 Web HMI
- Support for Both MODBUS® TCP and MODBUS UDP Protocols
- Communication Security
- Dual Watchdog
- Wide Operating Temperature Range: -25 to 75°C (-13 to 167°F)
- I/O Pair Connection
- Built-In I/O
 - Power Relay: 8 Channels

Applications

- Building Automation
- ✓ Factory Automation
- Machine Automation
- Remote Maintenance
- Remote Diagnosis
- Testing Equipment



Pin Assignments



OME-ET-7067/OME-PET-7067 is a web-based ethernet relay module that features a built-in web server which allows configuration, I/O monitoring and I/O control by simply using a web browser. Using the web HMI function, no more programming or HTML skills are required. The user can create dynamic and attractive web pages easily. The module offers easy and safe access for users at anytime and from any location. It also supports MODBUS TCP protocol that makes perfect integration to SCADA software.

The module provides 8 form A electromechanical relays. It features optical isolation for 3000 Vrms of transient overvoltage protection and doesn't have channel-tochannel isolation. The power-on value and safe value of relay are programmable. It can safely be used in applications where hazardous voltages are present.

System Specifications

System Specification	OME-ET-7067	OME-PET-7067
	OME-E1-7067	OME-PE1-7067
Software		/2.2
Built-in Web Server Web HMI	Yes	
I/O Pair Connection	Y	és
Communication	10/100 h = = = T	
Ethernet Port		X with auto MDI/ DI-X
PoE		Yes
Protocol	MODBUS TCP,	MODBUS UDP
Security	•	d and IP filter
Dual Watchdog		(0.8 seconds), (programmable)
LED Indicators		
L1 (System Running)	Y	′es
L2 (Ethernet Link/Act)	Yes	
L3 (Ethernet 10/100 M Speed)	Ŷ	és
PoE Power		Yes
2-Way Isolation		
Ethernet	1500 Vdc	—
I/O	3000 Vrms	3000 Vrms
EMS Protection		
ESD (IEC 61000-4-2)	4 kV contact for	or each terminal
EFT (IEC 61000-4-4)	±2 kV for power	
Power Requirements		
Reverse Polarity Protection	Yes	
Powered from Terminal	Yes, 10 to 30	Yes, 12 to 48
Block	Vdc	Vdc
Powered from PoE		Yes, IEEE 802.3af, class1
Consumption	2.9 W	3.5 W
Mechanical		
Dimensions (W x L x D)	72 x 123 x 35 mm (2.83 x 4.84 x 1.37")	
Installation	DIN-rail or wall mounting	
Environment		
Operating Temperature	-25 to 75°C	(-13 to 167°F)
Storage Temperature	-30 to 80°C	(-22 to 176°F)
Humidity	10 to 90% RH,	non-condensing
Model No. Desc	ription	

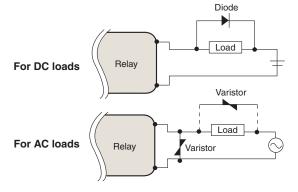
I/O Specifications

Power Relay		
Channels		8
Туре		Power relay, form A (SPST N.O.)
Operating Voltage Range		250 Vac/30 Vdc
Max. Load Current		5.0A/channel at 25°C
Operate Time		6 ms (typical)
Release Time		3 ms (typical)
		5A 250 Vac 30,000 ops
	VDE	(10 ops/minute) at 75°C
Electrical Life	VDL	5A 30 Vdc 70,000 ops
(Resistive Load)		(10 ops/minute) at 75°C
	UL	5A 250 Vac/30 Vdc 6,000 ops
		3A 250 Vac/30 Vdc 100,000 ops
Mechanical Life		20,000,000 ops. at no load
		(300 ops/minute)
Power-on Value		Yes, programmable
Safe Value		Yes, programmable

Wire Connections

Power Relay	ON State Readback as 1	OFF State Readback as 0
Relay Output	RLx.COM Relay Close AC/DC LOAD To other RLx.NO To other i channels	RLx.COM Relay Open AC/DC LOAD RLx.NO To other i channels

Note: When inductive loads are connected to the relays, a large counter electromotive force may occur when the relay actuates because of the energy stored in the load. These flyback voltages can severely damage the relay contacts and greatly shorten the relay life.



Varistor Selection

Operating Voltage	Varistor Voltage	Maximum Peak Current
100 to 120 Vac	240 to 270 Vac	> 1000 A
200 to 240 Vac	440 to 470 Vac	> 1000 A

Model No.	Description
OME-ET-7067	8-channel power relay output module
OME-PET-7067	8-channel power relay output module with PoE
RAIL-35-1	35 mm (1.4") DIN rail, 1 m (3.3') length
iDRN-PS-1000	DIN rail power supply, 95 to 240 Vac input, 24 Vdc output at 850 mA
OM-ESW-105	5-port unmanaged ethernet switch
OM-ESW-105-POE	5-port POE ethernet switch (four 10/100 base TX ports with POE and one 10/100 base TX uplink port)

Comes complete with wall mount bracket, quick start guide, utility software and operator's manual on CD. Ordering Example: OME-ET-7067 8-channel power relay output module and OCW-1 OMEGACARESM extends standard 1-year warranty to a total of 2 years.

omega.co.uk®

Your One-Stop Source for Process Measurement and Control!

Freephone 0800 488 488 | International +44(0) 161 777 6622 | Fax +44(0) 161 777 6622 | Sales@omega.co.uk

www.omega.co.uk



UNITED STATES www.omega.com 1-800-TC-OMEGA Stamford, CT.

CANADA <u>www.omega.ca</u> Laval(Quebec)

1-800-TC-OMEGA

GERMANY

www.omega.de Deckenpfronn, Germany 0800-8266342 UNITED KINGDOM www.omega.co.uk Manchester, England 0800-488-488 +44-(0)161-777-6611

> FRANCE www.omega.fr 0800-466-342

BENELUX www.omega.nl 0800-099-33-44



More than 100,000 Products Available!

Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders, Relative Humidity Measurement Instruments, PT100 Probes, PT100 Elements, Temperature & Process Meters, Timers and Counters, Temperature and Process Controllers and Power Switching Devices, Thermistor Elements, Probes and Assemblies, Thermocouples, Thermowells and Head and Well Assemblies, Transmitters, Thermocouple Wire, RTD Probes

Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

Data Acquisition

Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485, Ehernet and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

• Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Pressure Transmitters, Strain Gauges, Torque Transducers, Valves

Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters