

Ethernet Remote I/O Modules

OME-ET-7000/ OME-PET-7000 Series



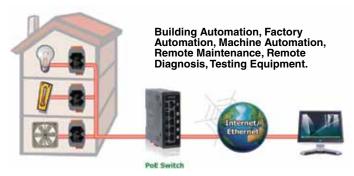
- Multi-Function Web Based Ethernet I/O Modules-Models Available For Thermocouple, RTD, Analog Voltage and Current Input
- ✓ Built-In Web Server for Remote Configuration and I/O Monitoring/Control
- ✓ Web HMI
- Communications Security
- ✓ Supports MODBUS® TCP and UDP Protocols
- ✓ OME-PET-7000 Series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



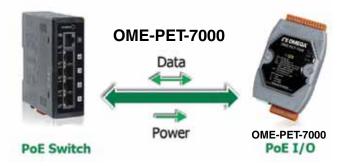


OMEGACARE™ extended warranty program is available for this series. Ask your sales representative for full details when placing an order. OMEGACARE™ covers parts, labor and equivalent loaners.



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.





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

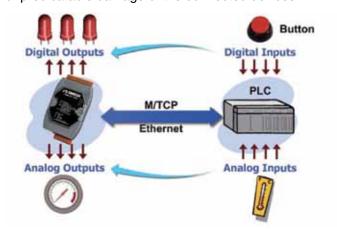
Various I/O components are mixed with multiple channels in a single module, which provides the most cost effective I/O usage and enhances performance of the I/O operations.

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.

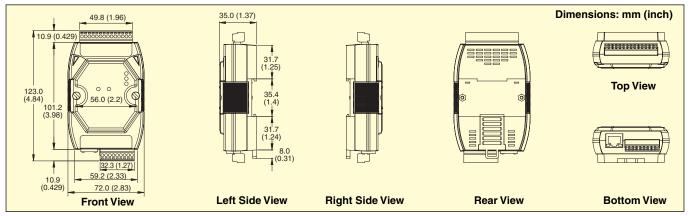
Safe Value: When the Communication Watchdog is enabled and a Communication Watchdog timeout occurs, the "safe value" is loaded into the AO/DO.

9. I/O Pair Connection

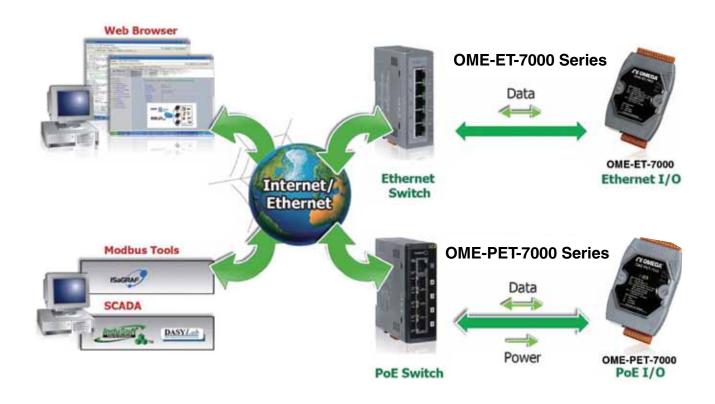
This function is used to create a Al/DI to AO/DO pair through the Ethernet. Once the configuration is completed, the OME-ET-7000/OME-PET-7000 module can poll the status of remote Al/DI devices and then use the MODBUS TCP protocol to continuously write to local AO/DO channels in the background.

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

		Al			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.



Multifunction I/O

		Al			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	_		_

3-Channel Analog Input and DIO Modules

OME-ET-7002/OME-PET-7002



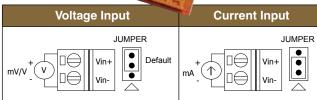
- ✓ Web HMI
- ✓ Support for both MODBUS® TCP and MODBUS UDP Protocols
- ✓ Communication Security
- Dual Watchdog
- ✓ Wide Operating Temperature Range: -25 to 75°C (-13 to 167°F)
- ✓ I/O Pair Connection
- ✓ Built-In I/O
 - AI: 3 Channels with 240 Vrms **Overvoltage Protection**
 - DI/Counter: 6 Channels
 - Power Relay: 3 Channels

Applications

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

The OME-ET-7002/OME-PET-7002 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-7002/OME-PET-7002 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-7002 features "PoE", meaning that not only is data transmitted through an Ethernet cable but also power making installation of the OME-PET-7002 easy. No more unnecessary wires with only an ethernet cable being required to take care of everything in the field. The OME-ET-7002/OME-PET-7002 is a multi-function module; there are 3-channel analog inputs, 6-channel digital inputs and 3-channel relay outputs module. It provides programmable input range on all analog inputs (±150 mV, ±500 mV, ±1 V, ±5 V, ±10 V, ±20 mA, 0 to 20 mA and 4 to 20 mA). Each analog input is allowed to configure an individual range and has 240 Vrms high overvoltage protection. Jumper selectable for voltage or current inputs, OME-ET-7002/OME-PET-7002 is fully RoHS-compliant and has qualification for 4 kV ESD protection as well as 2500 Vdc intra-module isolation.





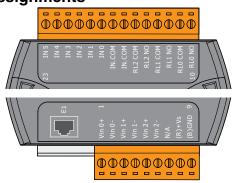
Digital Input/	Readback as 1	Readback as 0
Counter	10 to 50 Vdc	OPEN or <4 Vdc
Sink	DI.COM To other channels	DIX 10K To other DI.COM To other
	10 to 50 Vdc	OPEN or <4 Vdc
Source	DIX 10K TO other channels	DIX 10K



System Specifications

System Specificat	10115	
Models	OME-ET-7002	OME-PET-7002
Software		
Built-in Web Server	Y	'es
Web HMI	Y	'es
I/O Pair Connection	Y	'es
Communication		
Ethernet Port	10/100 base-T	X with Auto MDI/
	MI	DI-X
PoE	_	Yes
Protocol		MODBUS UDP
Security	ID, passwor	d and IP filter
Dual Watchdog	Yes, module	(0.8 seconds),
	communication	(programmable)
LED Indicators		
L1 (System Running)		<u>′es</u>
L2 (Ethernet Link/Act)	Y	'es
L3 (Ethernet	Y	'es
10/100 M Speed) PoE Power		V
	_	Yes
2-Way Isolation	4500 \/	
Ethernet I/O	1500 Vdc	— 0500 \/-l-
. •	2500 Vdc	2500 Vdc
EMS Protection	4 kV contact for	or each terminal
ESD (IEC 61000-4-2)		or random point
EFT (IEC 61000-4-4)	4/1// f	or power
Surge (IEC 61000-4-5)	±4 KV I	or power
Power Requirements	<u> </u>	or power
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 m	m (2.8 x 4.8 x 1.4)
Installation		vall mounting
Environment	DIN-IAII OI V	van mounting
Operating		
Temperature	-25 to 75°C	(-13 to 167°F)
Storage Temperature	-30 to 80°C	(-22 to 176°F)
Humidity		non-condensing
Trailmaity	10 10 00 /0 1111,	oondononig

Pin Assignments



I/O Specifications

	IICations		
Analog Inp	ut		
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 Channel Configuration		Yes	
Resolution Normal Mode		16-bit	
nesolution	Fast Mode	12-bit	
Sampling	Normal Mode	10 samples/second (total)	
Rate	Fast Mode	60 samples/second (total)	
	Normal Mode	±0.1%	
Accuracy	Fast Mode	±0.5% or better	
Zero Drift		±20 μV/°C	
Span Drift		±25 ppm/°C	
	e Protection	240 Vrms	
	t Protection	50 mA maximum at 110 Vdc/Vac maximum	
Input	Voltage	2 ΜΩ	
Impedance	Current	124 Ω	
Common N	lode Rejection	86 dB minimum	
Normal Mo	de Rejection	100 dB	
Digital Inpu	ıt/Counter		
Channels		6	
Contact		Wet contact	
Sink/Sourc	e (NPN/PNP)	Sink/source	
On Voltage		10 Vdc to 50 Vdc	
Off Voltage		4 Vdc maximum	
Input Impe		10 kΩ, 0.5W	
	Channels	6	
	Maximum Count	4,294,967,285 (32-bit)	
Counters	Maximum Input	100 Hz	
-	Frequency Minimum		
	Pulse Width	5 ms	
Overvoltag	e Protection	50 Vdc	
Power Rela	y		
Channels		3	
Туре		Power relay, Form A (SPST N.O.)	
Operating \	/oltage Range	250 Vac/30 Vdc	
Maximum L	oad Current	5.0A/channel at 25°C	
Operate Tir	ne	6 ms (typical)	
Release Tir	ne	3 ms (typical)	
Electrical Life (Resistive Load)		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 5 A @ 250 Vac/30 Vdc 6000 ops 3 A @ 250 Vac/30 Vdc 100,000 ops	
Mechanica		20,000,000 ops. at no load (300 ops./minute)	
Intra-modu Field-to-Lo	le Isolation, gic	3750 Vdc	
Power-on V		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	5-port POE ethernet switch (four 10/100 base TX ports with POE and one 10/100 base TX uplink port)



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.



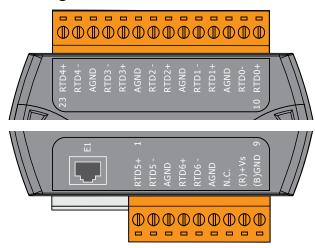
OME-ET-7015/OME-PET-7015 is specifically designed for long-distance RTD measurement. It features automatic compensation for three-wire RTD so that it can measure correctly regardless of the length of wires and provide open wire detection for RTD measurement. OME-ET-7015/OME-PET-7015 offers 7 channels, 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.

Open Collector (Sink)	CH0, 1, 2, 5 and 6	CH3 and CH4
2-Wire of RTD	© □ RTDx+ RTDx- AGND	© RTD3+ RTD3- RTD3- AGND RTD4- RTD4- RTD4+
3-Wire of RTD	® □⊜ RTDx+RTDx-AGND	RTD3+ RTD3- AGND RTD4- RTD4+



System Specifica	ĭ	OME DET TOUR	
Model No.	OME-ET-7015	OME-PET-7015	
Software			
Built-in Web Server	Yes		
Web HMI	Ye		
I/O Pair Connection	Ye	es .	
Communication	40/400 B TV		
Ethernet Port	10/100 Base-TX with Auto MDI/ MDI-X		
PoE	_	Yes	
Protocol	MODBUS TCP,		
Security	ID, password		
Dual Watchdog	Yes, module (I communication (
LED Indicators			
L1 (System Running)	Ye	es	
L2 (Ethernet Link/Act)	Ye	es	
L3 (Ethernet 10/100 M Speed)	Yes		
PoE Power	_	Yes	
2-Way Isolation			
Ethernet	1500 Vdc	_	
1/0	2500 Vdc	2500 Vdc	
EMS Protection			
ESD (IEC 61000-4-2)	4 kV contact for each terminal and 8 kV air for random point		
EFT (IEC 61000-4-4)	±4 kV fo	r 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	2.0 W	2.6 W	
Mechanical			
Dimensions	72 x 123		
(W x L x D)	(2.8 x 4.84	·	
Installation	DIN-rail or wall mounting		
Environment			
	1		
Operating Temperature	-25 to 75°C (-	-13 to 167°F)	
	-25 to 75°C (- -30 to 80°C (-		

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 MÖDBUS 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
 - AI: 8 Channels with 240 Vrms **Overvoltage Protection**
 - DO: 4 Channels

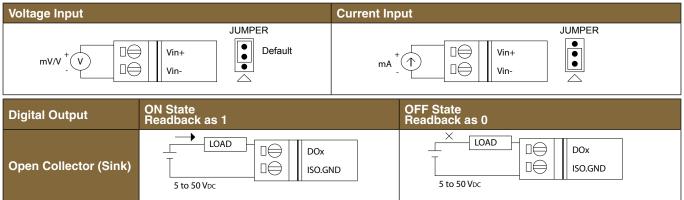
Applications

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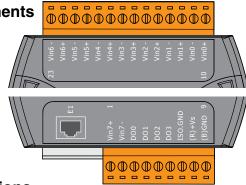
The OME-ET-7017/OME-PET-7017 is a 16-bit, 8-channel differential analog input and 4-channel digital ouput module that provides programmable input range on all analog channels (±150 mV, ±500 mV, ±1 V, ±5 V, ±10 V, ±20 mA, 0 to 20 mA and 4 to 20 mA) and digital output can be set as alarm output with short-circuit 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.





Models OME-ET-7017 OME-PET-7017 Software Yes Built-in Web Server Yes Web HMI Yes 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 Yes, module (0.8 seconds), communication (programmable) LED Indicators L1 (System Running) L1 (System Running) Yes L2 (Ethernet Link/Act) Yes L3 (Ethernet 10/100 M Speed) Yes PoE Power — Yes 2-Way Isolation The control of	System Specificat		
Web HMI		OME-ET-7017	OME-PET-7017
Web HMI			
VO Pair Connection Yes	Built-in Web Server	Ye	es
Ethernet Port 10/100 base-TX with auto MDI/MDI-X		Ye	es
Ethernet Port 10/100 base-TX with auto MDI/MDI-X PoE	I/O Pair Connection	Ye	es
PoE	Communication		
Protocol Security Dual Watchdog LED Indicators L1 (System Running) L2 (Ethernet Link/Act) L3 (Ethernet 10/100 M Speed) POE Power 2-Way Isolation Ethernet 1/0 ESD (IEC 61000-4-2) Fower Requirements Reverse Polarity Protection Powered from Terminal Block Powered from PoE Consumption	Ethernet Port		
ID, password and IP filter Yes, module (0.8 seconds), communication (programmable)	PoE	_	
Pes, module (0.8 seconds), communication (programmable) LED Indicators L1 (System Running) L2 (Ethernet Link/Act) L3 (Ethernet 10/100 M Speed) PoE Power Power	Protocol	MODBUS TCP,	MODBUS UDP
Communication (programmable) LED Indicators L1 (System Running) L2 (Ethernet Link/Act) L3 (Ethernet 10/100 M Speed) PoE Power PoE Power Power State Speed	Security		
L1 (System Running) L2 (Ethernet Link/Act) L3 (Ethernet 10/100 M Speed) PoE Power 2-Way Isolation Ethernet 1500 Vdc	Dual Watchdog		
L2 (Ethernet Link/Act) L3 (Ethernet 10/100 M Speed) PoE Power 2-Way Isolation Ethernet 1500 Vdc			
L3 (Ethernet 10/100 M Speed) 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 and 8 kV air for random point EFT (IEC 61000-4-4) 5 4 kV for power Power Requirements Reverse Polarity Protection Powered from Terminal Block 7es, 10 to 30 Vdc 12 to 48 Vdc Powered from PoE 7es, IEEE 802.3af, class1 Consumption 2.6 W 3.1 W Mechanical Dimensions (W x L x D) (2.83 x 4.84 x 1.38") Installation DIN-rail or wall mounting Environment Operating Temperature -25 to 75°C (-13 to 167°F)			
10/100 M Speed PoE Power	,	Ye	es
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 and 8 kV air for random point EFT (IEC 61000-4-4) ±4 kV for power Power Requirements Reverse Polarity Protection Yes, Yes, 10 to 30 Vdc 12 to 48 Vdc Powered from PoE — Yes, IEEE 802.3af, class1 Consumption 2.6 W 3.1 W Mechanical Dimensions (W x L x D) (2.83 x 4.84 x 1.38") Installation DIN-rail or wall mounting Environment Operating Temperature -25 to 75°C (-13 to 167°F)		Yes	
Ethernet 1500 Vdc — 1/O 2500 Vdc 2500 Vdc EMS Protection ESD (IEC 61000-4-2) 4 kV contact for each terminal and 8 kV air for random point EFT (IEC 61000-4-4) ±4 kV for power Power Requirements Reverse Polarity Protection Yes, 10 to 30 Vdc 12 to 48 Vdc Powered from PoE — Yes, IEEE 802.3af, class1 Consumption 2.6 W 3.1 W Mechanical Dimensions (W x L x D) (2.83 x 4.84 x 1.38") Installation DIN-rail or wall mounting Environment Operating Temperature -25 to 75°C (-13 to 167°F)	PoE Power	_	Yes
### Protection ### ESD (IEC 61000-4-2) ### ESD (IEC 61000-4-2) ### EFT (IEC 61000-4-4) ### Power Requirements ### Reverse Polarity Protection ### Powered from Terminal Block ### Powered from PoE ### Powered from	2-Way Isolation		
EMS Protection ESD (IEC 61000-4-2) EFT (IEC 61000-4-4) Power Requirements Reverse Polarity Protection Powered from Terminal Block Powered from PoE Consumption Mechanical Dimensions (W x L x D) Installation EMS Protection 4 kV contact for each terminal and 8 kV air for random point ### 4 kV for power ### Yes Yes 10 to 30 Vdc 12 to 48 Vdc Yes, IEEE 802.3af, class1 72 x 123 x 35 mm (2.83 x 4.84 x 1.38") Installation DIN-rail or wall mounting Environment Operating Temperature -25 to 75°C (-13 to 167°F)		1500 Vdc	_
### ESD (IEC 61000-4-2) ### EFT (IEC 61000-4-4) ### EFT (IEC 61000-4-4) ### Power Requirements ### Reverse Polarity Protection ### Powered from Terminal Block ### Powered from PoE ### Consumption ### Powered from PoE ### Consumption ### 2.6 W ### 3.1 W ### Mechanical ### Dimensions ### (2.83 x 4.84 x 1.38") ### Installation ### DIN-rail or wall mounting ### Environment ### Operating ### Topical or such terminal and 8 kV air for each terminal and 8 kV air for each terminal and 8 kV air for each terminal and 8 kV air for random point ### 4 kV for power ### 4 kV for power ### Yes ### 12 to 48 Vdc ### 26 W ### 3.1 W ### Mechanical ### DIN-rail or wall mounting ### Environment ### Operating ### Temperature ### -25 to 75°C (-13 to 167°F)	1/0	2500 Vdc	2500 Vdc
and 8 kV air for random point EFT (IEC 61000-4-4) Power Requirements Reverse Polarity Protection Powered from Terminal Block Powered from PoE Consumption Mechanical Dimensions (W x L x D) Installation Environment Operating Temperature and 8 kV air for random point ±4 kV for power Yes, 12 to 48 Vdc 12 to 48 Vdc Yes, IEEE 802.3af, class1 72 x 123 x 35 mm (2.83 x 4.84 x 1.38") Installation DIN-rail or wall mounting	EMS Protection		
Power Requirements Reverse Polarity Protection Powered from Terminal Block Powered from PoE Powered from PoE Tensions (W x L x D) Installation Powered from PoE Tensions (W x L x D) Installation Powered from PoE Tensions (V x L x D) Installation Powered from PoE Tensions (V x L x D) Installation Powered from PoE Tensions (V x L x D) Installation Tensions Tensions (C.83 x 4.84 x 1.38") DIN-rail or wall mounting Tensions Tensi	ESD (IEC 61000-4-2)		
Reverse Polarity Protection Powered from Terminal Block Powered from PoE Powered	EFT (IEC 61000-4-4)	±4 kV for power	
Protection Yes, 10 to 30 Vdc Yes, 12 to 48 Vdc Powered from PoE — Yes, IEEE 802.3af, class1 Consumption 2.6 W 3.1 W Mechanical 72 x 123 x 35 mm (2.83 x 4.84 x 1.38") Installation DIN-rail or wall mounting Environment -25 to 75°C (-13 to 167°F)	Power Requirements		
Terminal Block 10 to 30 Vdc 12 to 48 Vdc Powered from PoE — Yes, IEEE 802.3af, class1 Consumption 2.6 W 3.1 W Mechanical — 72 x 123 x 35 mm (2.83 x 4.84 x 1.38") Installation DIN-rail or wall mounting Environment Operating Temperature -25 to 75°C (-13 to 167°F)		Yes	
Solution Consumption Con		i i	·
Mechanical Dimensions (W x L x D) (2.83 x 4.84 x 1.38") Installation DIN-rail or wall mounting Environment Operating Temperature -25 to 75°C (-13 to 167°F)	Powered from PoE	_	
Mechanical Dimensions 72 x 123 x 35 mm (W x L x D) (2.83 x 4.84 x 1.38") Installation DIN-rail or wall mounting Environment Operating 72 x 123 x 35 mm (2.83 x 4.84 x 1.38") Temperature -25 to 75°C (-13 to 167°F)	Consumption	2.6 W	
(W x L x D) (2.83 x 4.84 x 1.38") Installation DIN-rail or wall mounting Environment Operating -25 to 75°C (-13 to 167°F)	•		
Installation DIN-rail or wall mounting Environment Operating -25 to 75°C (-13 to 167°F) Temperature		72 x 123 x 35 mm	
Environment Operating Temperature -25 to 75°C (-13 to 167°F)	•	(2.83 x 4.84 x 1.38")	
Operating Temperature -25 to 75°C (-13 to 167°F)		DIN-rail or wall mounting	
-25 to 75°C (-13 to 167°F)			
Storage Temperature -30 to 80°C (-22 to 176°F)		-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	Humidity	10 to 90% RH, non-condensing	

Pin Assignments



I/O Specifications

Analog Inpu	Analog Input		
Channels		8 (differential)	
Туре		±150 mV, ±500 mV, ±1V, ±5V, ±10V, ±20 mA, 0 to 20 mA, 4 to 20 mA (jumper selectable)	
Individual Cl Configuration	n	Yes	
Resolution	Normal Mode	16-bit	
riesolution	Fast Mode	12-bit	
Sampling	Normal Mode	10 samples/second (total)	
Rate	Fast Mode	60 samples/second (total)	
Accuracy	Normal Mode	±0.1%	
Accuracy	Fast Mode	±0.5% or better	
Zero Drift		±20 μV/°C	
Span Drift		±25 ppm/°C	
Overvoltage		240 Vrms	
Input	Voltage	2 ΜΩ	
Impedance	Current	125 Ω	
Common Mo	de Rejection	86 dB minimum	
Normal Mod	e Rejection	100 dB	
Digital Outpu	ut		
Channels		4	
Туре		Isolated open collector	
Sink/Source		Sink	
Maximum Lo	oad Current	700 mA/channel	
Load Voltage		5 Vdc 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	

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	DM-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.



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
 - Al: 10 Differential/20 Single-Ended Channels with 240 Vms Overvoltage Protection

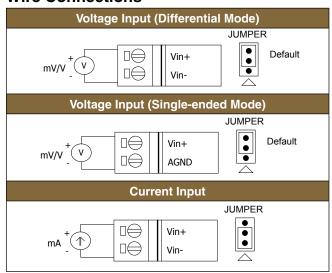
The OME-ET-7017-10/OME-PET-7017-10 is a web-

Applications

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

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-7017-10/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 (±150 mV, ±500 mV, ±1 V, ±5 V, ±10 V, ±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 qualification for 4 kV ESD protection as well as 3000 Vdc intra-module isolation.

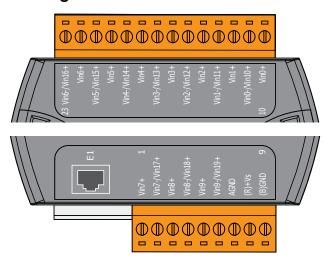






Models	OME-ET-7017-10	OME-PET-7017-10
Software	OILLE ET TOTT TO	O2 1 2 1 7 0 11 10
Built-in Web Server	<u> </u>	Yes
Web HMI		Yes
I/O Pair Connection		res Yes
Communication		res
Ethernet Port	10/100 Boss TV v	uith Auto MDI/MDI V
PoE	10/100 base-17 v	vith Auto MDI/MDI-X Yes
Protocol	MODBUG® TO	P, MODBUS UDP
		rd and IP filter
Security		
Dual Watchdog		(0.8 seconds), n (programmable)
LED Indicators	communication	(programmable)
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	2500 Vdc	2500 Vdc
EMS Protection		
ESD (IEC 61000-4-2)	4 kV contact for each terminal and 8 kV air for random point	
EFT (IEC 61000-4-4)	±4 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	2.6 W	3.8 W
Mechanical		
Dimensions	70 v 100 v 05 v	(0.00 × 4.04 × 4.00")
(W x L x D)	72 x 123 x 35 mm (2.83 x 4.84 x 1.38")	
Installation	DIN-rail or wall mounting	
Environment		
Operating	-25 to 75°C	
Temperature	-25 t	o 75°C
Temperature Storage Temperature		o 75°C o 80°C

Pin Assignments



I/O Specifications

1/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 Channel Configuration		Yes	
Resolution	Normal Mode	16-bit	
	Fast Mode	12-bit	
Sampling Rate	Normal Mode	10 samples/second (total)	
	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	
Our a walka wa	Differential	240 Vrms	
	Single- Ended	150 Vrms	
Input Impedance	Voltage	2 MΩ (differential), 1 MΩ (single-ended)	
impedance	Current	125 Ω	
Common Mode 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	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.



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.

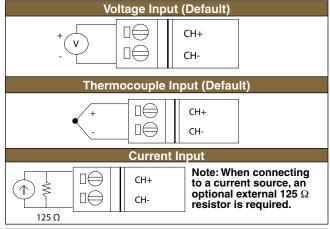
The OME-ET-7018Z/OME-PET-7018Z is specifically designed for extremely accurate thermocouple measurement and features automatic cold-junction compensation for each channel to ensure temperature output consistency and stable temperature output in the field. Current input and voltage input are both supported. 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 Specif		OME DET 70407	
Model No.	OME-ET-7018Z	OME-PET-7018Z	
Software			
Built-in Web	Υ	'es	
Server	,	,	
Web HMI	Y	'es	
I/O Pair	Y	⁄es	
Connection			
Communication			
Ethernet Port	10/100 Base-TX w	vith Auto MDI/MDI-X	
PoE		Yes	
Protocol		P, MODBUS UDP	
Security		d and IP filter	
Dual Watchdog		(0.8 seconds),	
	communication	(programmable)	
LED Indicators			
L1 (System	Y	⁄es	
Running)			
L2 (Ethernet	Y	⁄es	
Link/Act)			
L3 (Ethernet	Y	⁄es	
10/100 M Speed)			
PoE Power	_	Yes	
2-Way Isolation			
Ethernet	1500 Vdc	<u> </u>	
1/0	2500 Vdc	2500 Vdc	
EMS Protection	4174		
ESD	4 kV contact for each terminal and		
(IEC 61000-4-2)	8 kV air for random point		
EFT	±4 kV for Power		
(IEC 61000-4-4)			
Power Requirements			
Reverse Polarity	Y	'es	
Protection			
Powered from	Yes, 10 to 30 Vdc	Yes, 12 to 48 Vdc	
Terminal Block Powered		Voc IEEE 000 0-4	
from PoE	_	Yes, IEEE 802.3af,	
	2.0 W	class1 3.0 W	
Consumption Mechanical	Z.U VV	3.U VV	
Mechanical			
Dimensions	72 x 116 x 35 mm	(2.83 x 4.5 x 1.37")	
Dimensions (W x L x D)			
Dimensions (W x L x D) Installation		(2.83 x 4.5 x 1.37") vall mounting	
Dimensions (W x L x D) Installation Environment			
Dimensions (W x L x D) Installation Environment Operating	DIN-rail or v		
Dimensions (W x L x D) Installation Environment Operating Temperature	DIN-rail or v	vall mounting	
Dimensions (W x L x D) Installation Environment Operating Temperature Storage	DIN-rail or v	vall mounting	
Dimensions (W x L x D) Installation Environment Operating Temperature	DIN-rail or v -25 to 75°C -30 to 80°C	vall mounting (-13 to 167°F)	

I/O Specifications

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		
Selisoi Type	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	103		
Stable Temperature	Yes		
Output in the Field	100		
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		

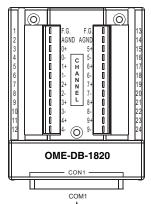


Digital Output	ON State Readback as 1	OFF State Readback as 0
Open Collector (Sink)	LOAD DOX DOX ISO.GND	LOAD DOX DOX ISO.GND

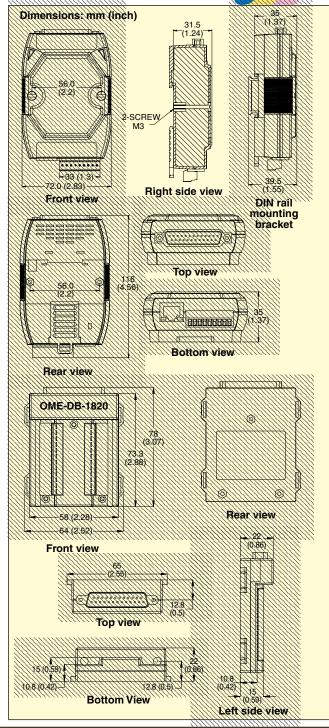


The OME-DB-1820 daughter board (terminal panel) connects directly to the OME-ET-7018Z or OME-PET-7018Z Ethernet module.

Pin Assignments







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

Models	OME-ET-7019Z	OME-PET-7019Z	
Software			
Built-in Web Server	Yes		
Web HMI	Y	es	
I/O Pair Connection	Y	es	
Communication			
Eth award David	10/100 Ba	se-TX with	
Ethernet Port	Auto ME	DI/MDI-X	
PoE	_	Yes	
Protocol	MODBUS TCP,	MODBUS UDP	
Security	ID, Password	and IP Filter	
	Yes, n	nodule	
Dual Watchdog	(0.8 seconds), o	communication	
	(prograr	mmable)	
LED Indicators			
L1 (System Running)	Y	es	
L2 (Ethernet Link/Act)	Y	es	
L3 (Ethernet 10/100 M	V	es	
Speed)	ies		
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		
, ,	and 8 kV air for random point		
EFT (IEC 61000-4-4)	±4 kV for power		
Surge (IEC 61000-4-5)	±3 kV fo	or power	
Power Requirements			
Reverse Polarity	Y	es	
Protection Powered from	Vaa	Voc	
Terminal Block	Yes, 10 to 30 Vdc	Yes, 12 to 48 Vdc	
Terrilliai Block	10 to 30 vac	Yes, IEEE	
Powered from PoE	_	802.3af, Class1	
Consumption	2.5 W	3.5 W	
Mechanical	2.5 VV 3.5 VV		
Dimensions	72 x 116	x 35 mm	
(W x L x D)	(2.83 x 4.56 x 1.37")		
Installation	DIN-rail or wall mounting		
Environment	Birt rail of Wall fillounding		
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		
	10 to 90% nm, non-condensing		

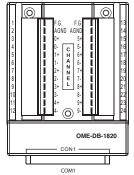
I/O Specifications

Analog Input		
Channels	10 (differential)	
	± 15 mV, ± 50 mV, ± 100 mV,	
	±150 mV, ±500 mV, ±1 V,	
	±2.5 V, ±5 V, ±10 V,	
Sensor Type	±20 mA, 0 to 20 mA, 4 to	
Selisor Type	20 mA (jumper selectable)	
	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	86 dB minimum	
Normal Mode Rejection	100 dB	
Temperature Output	Yes	
Consistency	100	
Stable Temperature	Yes	
Output in the Field		
Open Wire Detection	Yes	
Digital Output		
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	1.4 A	
Short-Circuit Protection	Yes programmable	
Power-On Value	Yes, programmable	
Safe Value	Yes, programmable	

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

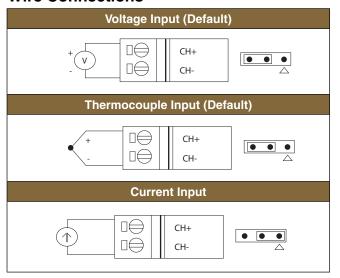


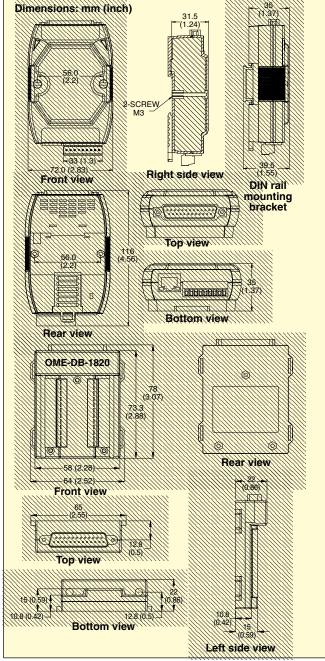
Pin Assignments





Wire Connections





	ON State	OFF State
Digital Output	Readback as 1	Readback as 0
Open Collector (Sink)	LOAD DOX ISO.GND	LOAD DOX ISO.GND

Model No.	Description
OME-ET-7019Z	10-channel thermocouple input module with OME-DB-1820 daughter board
OME-PET-7019Z	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-7019Z 10-channel thermocouple input module with OME-DB-1820 daughter board and OCW-1 OMEGACARE™ extends standard 1-year warranty to a total of 2 years.

Multifunction Analog/Digital I/O Modules

OME-ET-7026/OME-PET-7026



- ✓ Web HMI
- Support for Both MODBUS® TCP and MÖDBUS 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: 6 Channels with 240 Vrms Overvoltage Protection
 - AO: 2 Channels
 - DI/Counter: 2 Channels
 - DO: 2 Channels

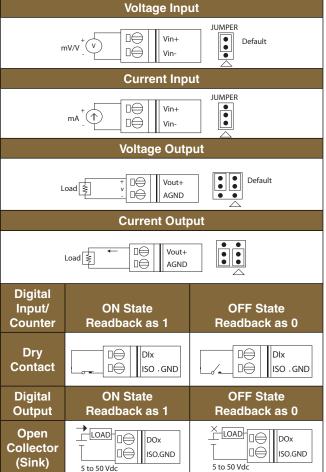
Applications

- 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.







Pin Assignments



System Specifications

Models	OME-ET-7026	OME-PET-7026	
Software	OWIE-E 1-7 020	OWIE-PE1-7020	
Built-in Web			
Server	Yes		
Web HMI	Ye	es	
I/O Pair	V	es	
Connection	11	63	
Communication	40/400 L TV	THE LANDIANDLY	
Ethernet Port	10/100 base-TX w	ith auto MDI/MDI-X	
PoE	—	Yes	
Protocol	,	MODBUS UDP	
Security		d and IP filter onds), communication	
Dual Watchdog	(nrograi	mmable)	
LED Indicators	(prograi	TITICOTO J	
L1 (System	V	es	
Running)			
L2 (Ethernet	Ye	es	
Link/Act) L3 (Ethernet			
10/100 M Speed)	Ye	es	
PoE Power	_	Yes	
2-Way Isolation			
Ethernet	1500 Vdc		
1/0	2500 Vdc	2500 Vdc	
EMS Protection	4127		
ESD		each terminal and	
(IEC 61000-4-2) EFT		random point	
(IEC 61000-4-4)	±4 kV for power		
Power Requirements			
Reverse Polarity	Yes		
Protection Powered from			
Terminal Block	Yes, 10 to 30 Vdc	Yes, 12 to 48 Vdc	
Powered	_	Yes, IEEE 802.3af,	
from PoE	0.4144	class1	
Consumption	3.1 W	4.2 W	
Mechanical Dimensions	Mechanical		
(W x L x D)	72 x 123 x 35 mm ((2.83 x 4.84 x 1.37")	
Installation	DIN-rail or w	vall mounting	
Environment			
Operating	-25 to 75°C (′-13 to 167°F)	
Temperature Storage	-25 to 75°C (-13 to 167°F)		
Temperature	-30 to 80°C (-22 to 176°F)		
Humidity	10 to 90% RH, non-condensing		
Model No.			
OME-ET-7026	Multifunction analog/digital I/O module		
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 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	·)	

and operator's manual on CD.

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

I/O Specification	ns
-------------------	----

Analog Input		
		6 (differential)
Channels		6 (differential)
Туре		±500 mV, ±1V, ±5 V, ±10 V 0 to 20 mA, ±20 mA, 4 to
		20 mA (jumper selectable)
Individual Channel		
Configurat		Yes
	Normal Mode	16-bit
Resolution	Fast Mode	12-bit
Sampling	Normal Mode	10 samples/second (total)
Rate	Fast Mode	60 samples/second (total)
	Normal Mode	±0.1%
Accuracy	Fast Mode	±0.5% or better
Zero Drift	i doi inodo	±20 μV/°C
Span Drift		±25 ppm/°C
	ge Protection	240 Vrms
Input Impe		2 ΜΩ
	Mode Rejection	86 dB minimum
	de Rejection	100 dB
Analog Ou	tput	
Channels		2
Type		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	Channel	
Configurat		Yes
Resolution		12-bit
Accuracy		±0.1% of FSR
	itput Capability	20 mA @ 10 V
	ad Resistance	500 Ω
Open Wire		Yes, for 4 to 20 mA only
Power-on \		Yes, programmable
Safe Value	rando	Yes, programmable
Digital Inp	ut/Counter	100, programmable
Channels		2
Chamileis	On Voltage Level	Close to GND
Dry	Off Voltage Level	Open
Contact	Effective	Ореп
(Source)	Distance for Dry	500 M maximum
	Contact	
Wet	On Voltage Level	1 Vdc maximum
contact		
(Sink/	Off Voltage Level	3.5 to 30 Vdc
Source)	Channels	
	Channels	4 204 067 205 (20 hit)
	Maximum Count	4,294,967,285 (32-bit)
Counters	Maximum Input Frequency	100 Hz
	Minimum Pulse	
	Width	5 ms
Overvoltage Protection		30 Vdc
Digital Output		
Channels 2		2
Туре		Isolated open collector
Sink/Source (NPN/PNP)		Sink
Maximum Load Current		700 mA/channel
		5 to 50 Vdc
Load Voltage Overvoltage Protection		60 Vdc
Overload Protection Short-Circuit Protection		1.4 A
		Yes
Power-on \	value	Yes, programmable
Safe Value		Yes, programmable

DATA ACQUISITION SYSTEMS 16-Channel Isolated Digital Output Modules OME-ET-7042/OME-PET-7042 VEAR CEFC ROLLS ✓ 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 000000000000000 ✓ Remote Diagnosis ✓ Testing Equipment



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.

ovense.

OME-PET-7042 shown actual size.



System Specificat	10115	
Models	OME-ET-7042	OME-PET-7042
Software		
Built-in Web Server	Yes	
Web HMI	Yes	
I/O Pair Connection		Yes
Communication		
Ethernet Port		ΓX with auto MDI/ lDI-X
PoE		Yes
Protocol	MODBUS TC	P, MODBUS UDP
Security	ID, passwo	ord and IP filter
Dual Watchdog		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	S 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,	Yes,
Terminal Block	10 to 30 Vdc	12 to 48 Vdc Yes, IEEE
Powered from PoE	_	802.3af, class1
Consumption	2.7 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		wall mounting
Environment		
Operating Temperature		
Storage Temperature	-30 to 80°C (-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

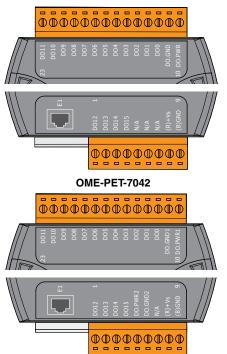
Models	OME-ET-7042	OME-PET-7042		
Digital Output	Digital Output			
Channels	•	16		
Туре	Isolated op	en collector		
Sink/Source (NPN/PNP)	Sink			
Maximum Load Current	100 mA/channel at 25°C direct drive power relay module			
Load Voltage	5 Vdc to 30 Vdc			
Overvoltage Protection	— 60 Vdc			
Overload Protection	— 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	DO.PWR DOX DO.GND	DO.PWR DOX DO.GND
Resistance Load	DO.PWR DOX DO.GND	DO.PWR DOX DO.GND

Pin Assignments

OME-ET-7042



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.



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-to-channel 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	INX 10K TYPE TO other IN.COM TO other channels	INX 10K To other IN.COM To other Channels
	10 to 50 Vdc	Open or < 4 Vdc
Source	INX 10K TY K TO other IN.COM To other	INX 10K INX 10K INX 10K INX 10K INX 10K INX 10K
Output Type	ON State OFF State Readback as 1 Readback as 0	
Drive Relay	□ DO.PWR DOX DO.GND	DO.PWR DOX DO.GND
Resistance Load	DO.PWR DOX DO.GND	DO.PWR DOX DO.GND

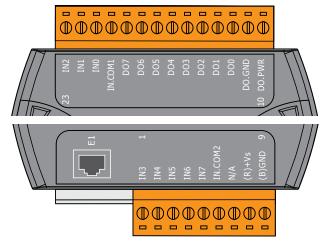


Models	OME-ET-7044	OME-PET-7044
Software	OIVIE-E 1-7044	OWIE-PE 1-7044
	V	
Built-in Web Server	Ye	
Web HMI		es
I/O Pair Connection	Ye	es
Communication		
Ethernet Port		(with auto MDI/ N-X
PoE		Yes
Protocol	MODBUS TCP,	MODBUS UDP
Security	ID, password	and IP filter
Dual Watchdog	Yes, module (communication	0.8 seconds), (programmable)
LED Indicators		
L1 (System Running)	Υe	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 fc	or 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 123 x 35 mm	
(W x L x D)		
Installation	DIN-rail or wall mounting	
Environment		
Operating Temperature	-25 to 75°C (-13 to 167°F)
Storage	-30 to 80°C (-22 to 176°F)	
Temperature		
Humidity	10 to 90% RH, non-condensing	

I/O Specifications

Divital Innut/Country			
Digital Input/Counter		0	
Channels		8	
Contact		Wet contact	
	e (NPN/PNP)	Sink/source	
On Voltage		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	
Overvoltage Protection		70 Vdc	
Digital Output			
Channels		8	
Туре		Isolated open collector	
	e (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-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-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



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.

Wife Confidentions		
Digital Input/Counter	Readback as 1	Readback as 0
	10 to 50 Vdc	Open or < 4 Vdc
Sink	INX 10K +- To other channels	INX 10K +- : To other IN.COM : channels
	10 to 50 Vdc	Open or < 4 Vdc
Source	INX 10K To other IN.COM To other The channels	INX 10K - + To other IN.COM : channels
Output Type	ON State Readback as 1	OFF State Readback as 0
Drive Relay	DO.PWR DOX DO.GND	DO.PWR DOX DO.GND
Resistance Load	DO.PWR DOX DO.GND	DO.PWR DOX DO.GND

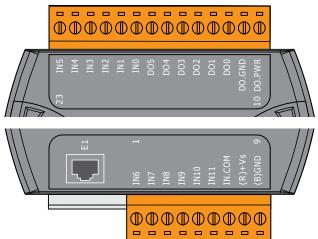


The module provides 12 wet contact digital input channels and 6 sink-type digital output channels. It features optical isolation for 3750 Vrms of transient overvoltage protection but doesn't provide channel-to-channel isolation. Each input channel can be used as a 32-bit counter and each output channel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

System Specifications

System Specificat	ions	
Models	OME-ET-7050	OME-PET-7050
Software		
Built-in Web Server	Y	'es
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	ID, passwor	d and IP filter
Dual Watchdog	Yes, module	(0.8 seconds),
	communication	(programmable)
LED Indicators		
L1 (System Running)	Y	'es
L2 (Ethernet Link/Act)	Y	'es
L3 (Ethernet	V	es es
10/100 M Speed)	res	
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,	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 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 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

Models	incations	OME-ET-7050	OME-PET-7050
Digital Input/Counter			
Channels		1	2
Contact		Wet co	ontact
Sink/Sour	ce (NPN/PNP)	Sink/s	ource
On Voltage		10 to 5	50 Vdc
Off Voltage	e Level	4 Vdc m	aximum
Input Impe	edance	10	kΩ
	Maximum Count	4,294,967,2	85 (32 bits)
Counters	Maximum Input Frequency	500 Hz	
	Minimum Pulse Width	1 ms	
Overvoltage Protection		70 \	√dc
Digital Output			
Channels		(
Туре		Isolated open 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 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-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 OMEGACARE™ 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.



Digital Input/Counter	Readback as 1	Readback as 0
	10 to 50 Vdc	Open or < 4 Vdc
Sink	INX 10K To other IN.COM To other Channels	INX 10K To other IN.COM Channels
	10 to 50 Vdc	Open or < 4 Vdc
Source	INX 10K TO other in.com	INX 10K To other in.com The initial

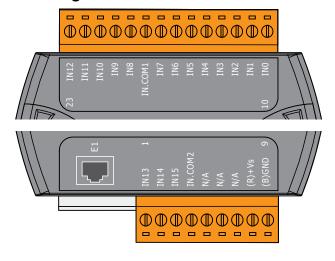


Models	OME ET 7051	OME-PET-7051
Software	OWIE-E 1-7031	OWIE-PE1-7031
Built-in Web Server	V	es
Web HMI		es
I/O Pair Connection		es
Communication	Y ·	es
Communication	10/100 boss T	K with auto MDI/
Ethernet Port		OI-X
PoE	_	Yes
Protocol		MODBUS UDP
Security		d and IP filter
Dual Watchdog		(0.8 seconds),
	communication	(programmable)
LED Indicators		
L1 (System Running)		es
L2 (Ethernet Link/Act)	Y	es
L3 (Ethernet	Yes	
10/100 M Speed)		
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 termina	
EFT (IEC 61000-4-4)	±2 kV for power	
Power Requirements		
Reverse Polarity	V	es
Protection	Į,	
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		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)
Operating Temperature		-13 to 167°F)
Operating	-30 to 80°C (-13 to 167°F) -22 to 176°F) non-condensing

I/O Specifications

Digital Input/Counter			
Channels		16	
Contact		Wet contact	
Sink/Source	ce (NPN/PNP)	Sink/source	
On Voltage Level		10 to 50 Vdc	
Off Voltage Level		4 Vdc maximum	
Input Impedance		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.



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 applications where hazardous voltages are present.

The Commediation	5 11 1 1	
Digital Input/Counter	Readback as 1	Readback as 0
	10 to 50 Vdc	Open or < 4 Vdc
Sink	INX 10K To other channels	INX 10K To other in.com To annels
	10 to 50 Vdc	Open or < 4 Vdc
Source	INX 10K INX 10K INX 10K INCOM INC	INX 10K
Digital Output	ON State Readback as 1	OFF State Readback as 0
Source	To other channels	To other channels

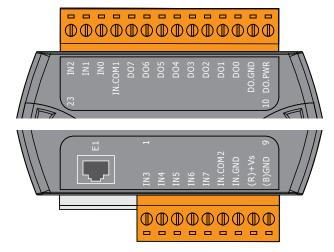


Models Software Built-in Web Server Web HMI I/O Pair Connection Ethernet Port PoE Protocol Security Dual Watchdog LED Indicators L1 (System Running) L2 (Ethernet Link/Act) L3 (Ethernet 10/100 M Speed) PoE Power 2-Way Isolation Ethernet 1500 Vdc I/O 3750 Vrms EMS Protection ESD (IEC 61000-4-2) EFT (IEC 61000-4-4) Powered from Terminal Block Powered from Terminal Block Powered from Terminal Block Powered from Terminal Block Poerating Consumption Powered from Poe Consumption Powered from Poe Consumption DIN-rail or wall mounting Environment Operating Temperature Humidity Poss Ves 10/100 MS-PET-7052 Ves Wes NOME-PT-7052 Ves NOME-PT-7052 NOME-PET-7052 Ves NOME-PT-7052 NOME-PT-7052 NOME-PT-7052 NOME-PT-7052 NOME-PT-7052 NOME-PT-7052 Nome-PTX With auto MDI/MDI-X Ves Poss POBUS UDP Ves, module (0.8 seconds), communication (programmable) Ves Nome IP (10 8 seconds) Ves NOBBUS UDP Ves Ves Secords Ves Ves 1500 Vdc Ves Ves Ves 1500 Vdc Ves, 12 to 48 Vdc Ves, 12 t	Madala	OME ET 7050	OME DET 7050
Built-in Web Server Web HMI Yes I/O Pair Connection Communication Ethernet Port I 10/100 base-TX with auto MDI/MDI-X PoE — Yes Protocol MODBUS TCP, MODBUS UDP Security Dual Watchdog LED Indicators L1 (System Running) L2 (Ethernet Link/Act) L3 (Ethernet 10/100 M Speed) PoE Power 2-Way Isolation Ethernet I/O STORY Web L5 (IEC 61000-4-2) EFT (IEC 61000-4-4) Power Requirements Reverse Polarity Protection Powered from Terminal Block Powered from PoE Consumption Powered from PoE Consumption Pixel Consumption Powered from PoE Consumption Pixel Consumption Pixel Consumption Powered from PoE Consumption Pixel Consumption Pi		OWE-E1-7052	OME-PE1-7052
Veb HMI			
I/O Pair Connection Yes		-	
Ethernet Port 10/100 base-TX with auto MDI/MDI-X			
Ethernet Port 10/100 base-TX with auto MDI/MDI-X		Y	es
PoE Yes Protocol MODBUS TCP, MODBUS UDP Security ID, password and IP filter Yes, module (0.8 seconds), communication (programmable) LED Indicators L1 (System Running) L2 (Ethernet Link/Act) L3 (Ethernet 10/100 M Speed) PoE Power Yes 2-Way Isolation Ethernet 1500 Vdc — I/O 3750 Vrms 3750 Vrms EMS Protection ESD (IEC 61000-4-2) EFT (IEC 61000-4-4) Power Requirements Reverse Polarity Protection Powered from Terminal Block Powered from PoE — Yes, 12 to 48 Vdc Yes, IEEE 802.3af, class1 Consumption 2.4 W 3.0 W Mechanical Dimensions (W x L x D) Installation DIN-rail or wall mounting Environment Operating Temperature Storage Temperature -30 to 80°C (-22 to 176°F)	Communication		
Protocol Security Dual Watchdog LED Indicators L1 (System Running) L2 (Ethernet Link/Act) PoE Power 2-Way Isolation Ethernet ISD (IEC 61000-4-2) Power Requirements Reverse Polarity Protection Powered from Terminal Block Powered from PoE Consumption Powered from PoE Consumption MODBUS TCP, MODBUS UDP ID, password and IP filter Yes, module (0.8 seconds), communication (programmable) Yes Yes 1500 Vdc Yes 1500 Vdc Was 3750 Vrms Was 3750 Vrms Was 3750 Vrms Wes Yes Yes 1500 Vdc Was 3750 Vrms Wes Was 4 kV contact for each terminal FFT (IEC 61000-4-2) Fower Requirements Reverse Polarity Protection Powered from Yes, Yes, Yes, 10 to 30 Vdc Yes, IEEE 802.3af, class1 Consumption 2.4 W 3.0 W Mechanical Dimensions Was 12 to 48 Vdc Yes, IEEE 802.3af, class1 Consumption 2.4 W 3.0 W Mechanical Dimensions Was 12 to 48 Vdc Yes, IEEE 802.3af, class1 Consumption Diny-rail or wall mounting Environment Operating Temperature -25 to 75°C (-13 to 167°F) Tornical or Wall mounting Temperature Storage Temperature -30 to 80°C (-22 to 176°F)	Ethernet Port		
ID, password and IP filter Yes, module (0.8 seconds), communication (programmable)		_	
Powered from Poe Power Power Powered from Poe Power Power Powered from Poe Power Powe	Protocol	MODBUS TCP,	MODBUS UDP
Communication (programmable) LED Indicators L1 (System Running) L2 (Ethernet Link/Act) L3 (Ethernet 10/100 M Speed) PoE Power 2-Way Isolation Ethernet 1/O 3750 Vrms EMS Protection ESD (IEC 61000-4-2) EFT (IEC 61000-4-4) Power Requirements Reverse Polarity Protection Powered from Terminal Block Powered from PoE Consumption Mechanical Dimensions (W x L x D) Installation END Indicators Yes 10 to 30 Vdc 12 to 48 Vdc Yes, IEEE 802.3af, class1 Consumption 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)	Security		
L1 (System Running)	Dual Watchdog	Yes, module (communication	(0.8 seconds), (programmable)
L2 (Ethernet Link/Act) Yes L3 (Ethernet 10/100 M Speed) Yes PoE Power 2-Way Isolation — Yes Ethernet 1500 Vdc — — Yes I/O 3750 Vrms 3750 Vrms 3750 Vrms EMS Protection ESD (IEC 61000-4-2) EFT (IEC 61000-4-2) ±2 kV for power 4 kV contact for each terminal ±2 kV for power Power Requirements Reverse Polarity Protection Powered from Terminal Block 10 to 30 Vdc 12 to 48 Vdc Yes, IEEE 802.3af, class1 Consumption 2.4 W 3.0 W 2.4 W 3.0 W Mechanical Dimensions (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 Storage Temperature -30 to 80°C (-22 to 176°F)	LED Indicators		
L3 (Ethernet 10/100 M Speed) Yes	L1 (System Running)	Y	es
10/100 M Speed PoE Power	L2 (Ethernet Link/Act)	Y	es
2-Way Isolation Ethernet	L3 (Ethernet 10/100 M Speed)	Yes	
The image	PoE Power	_	Yes
The image			
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 Reverse Polarity Protection Yes, Yes, 12 to 48 Vdc Powered from 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 (W x L x D) (2.83 x 4.84 x 1.37") Installation DIN-rail or wall mounting Environment -25 to 75°C (-13 to 167°F) Storage Temperature -30 to 80°C (-22 to 176°F)		1500 Vdc	_
ESD (IEC 61000-4-2) 4 kV contact for each terminal EFT (IEC 61000-4-4) ±2 kV for power Power Requirements Yes Reverse Polarity Yes, Protection Yes, 10 to 30 Vdc 12 to 48 Vdc Powered from PoE — Consumption 2.4 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 -25 to 75°C (-13 to 167°F) Storage 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	EMS Protection		
### EFT (IEC 61000-4-4) ### ±2 kV for power Power Requirements	ESD (IEC 61000-4-2)	4 kV contact for each terminal	
Power Requirements Reverse Polarity Protection Powered from Terminal Block Powered from PoE Consumption Mechanical Dimensions (W x L x D) Installation Environment Operating Temperature Storage Temperature Pyes, Yes, 12 to 48 Vdc Yes, IEEE 802.3af, class1 2.4 W 3.0 W (2.83 x 4.84 x 1.37") DIN-rail or wall mounting -25 to 75°C (-13 to 167°F)			
No. Protection Powered from Yes, 10 to 30 Vdc 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 DIN-rail or wall mounting Environment -25 to 75°C (-13 to 167°F) Storage Temperature -30 to 80°C (-22 to 176°F)	Reverse Polarity	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 (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 -25 to 75°C (-13 to 167°F) Storage Temperature -30 to 80°C (-22 to 176°F)		Yes,	Yes,
Storage Temperature Consumption Consum			12 to 48 Vdc
Mechanical 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 -25 to 75°C (-13 to 167°F) Temperature -30 to 80°C (-22 to 176°F)	Powered from PoE	_	
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 -25 to 75°C (-13 to 167°F) Temperature -30 to 80°C (-22 to 176°F)	Consumption	2.4 W	3.0 W
(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 -30 to 80°C (-22 to 176°F)			
Installation DIN-rail or wall mounting Environment Operating -25 to 75°C (-13 to 167°F) Temperature -30 to 80°C (-22 to 176°F)			
Environment Operating Temperature -25 to 75°C (-13 to 167°F) Storage Temperature -30 to 80°C (-22 to 176°F)			
Operating -25 to 75°C (-13 to 167°F) Storage Temperature -30 to 80°C (-22 to 176°F)	Installation	DIN-rail or wall mounting	
Temperature -25 to 75 C (-13 to 167 F) Storage Temperature -30 to 80°C (-22 to 176°F)	Environment		
Storage Temperature -30 to 80°C (-22 to 176°F)		-25 to 75°C (-13 to 167°F)
		-30 to 80°C (-22 to 176°F)	

I/O Specifications

Digital Inp	Digital Input/Counter		
Channels		8	
Contact		Wet contact	
Sink/Sour	ce (NPN/PNP)	Sink/source	
On Voltage	e Level	10 to 50 Vdc	
Off Voltage		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 Volta		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 OMEGACARESM extends standard 1-year warranty to a total of 2 years.



16-Channel Isolated Digital Input Modules

OME-ET-7053/OME-PET-7053



- ✓ 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.

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

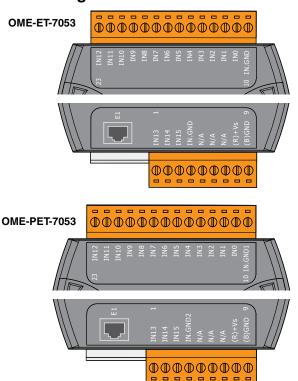


System Specificat		
Models	OME-ET-7053	OME-PET-7053
Software		
Built-in Web Server	`	Yes
Web HMI	`	Yes
I/O Pair Connection	`	Yes
Communication		
Ethernet Port		ase-TX with DI/MDI-X
PoE	_	Yes
Protocol	MODBUS TCF	P, MODBUS UDP
Security	ID, passwo	rd and IP filter
Dual Watchdog	(0.8 seconds)	ODULE , communication ammable)
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	_
1/0	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	Yes	
Protection		
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		
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	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	e Level	Open
Off Voltage Level		Close to GND
Counters	Maximum Count	4,294,967,285 (32 bits)
	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

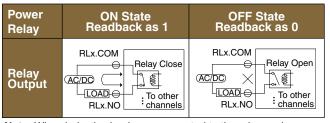
- Building Automation
- ✓ Factory Automation
- Machine Automation
- **✓** Remote Maintenance
- ✓ Remote Diagnosis
- ✓ Testing Equipment

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.



Digital Input/ Counter	Readback as 1	Readback as 0
	10 to 50 Vdc	OPEN or <4 Vdc
Sink	INX 10K INX 10K TO other channels	INX 10K To other in income in incom
	10 to 50 Vdc	OPEN or <4 Vdc
Source	INX 10K To other in income in incom	INX 10K To other ichannels



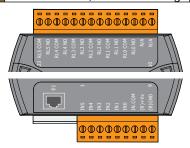
Note: When inductive loads are connected to the relays, a large counter electromotive force may occur when the relay actuates because of the energy stored in the load. These flyback voltages can severely damage the relay contacts and greatly shorten the relay life. Limit these flyback voltages at your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



System Specifications

System Specificat	ions	
Models	OME-ET-7060	OME-PET-7060
Software		
Built-in Web Server	Y	⁄es
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	ID, passwor	d and IP filter
Dual Watchdog		(0.8 seconds), (programmable)
LED Indicators		
L1 (System Running)		⁄es
L2 (Ethernet Link/Act)	Υ	′es
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 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	2.9 W	3.5 W
Mechanical		
Dimensions	72 x 123	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	10 to 90% RH, non-condensing	
Trailliaity	10 to 90% RH, non-condens	

Pin Assignments



I/O Specifications

Contact Wet contact	70 Specifications				
Wet contact Sink/Source (NPN/PNP) Sink/source On Voltage Level 10 to 50 Vdc	Digital Input/Counter				
Sink/Source (NPN/PNP) Sink/source	Channels			6	
On Voltage Level 10 to 50 Vdc Off Voltage Level 4 Vdc maximum Input Impedance 10 kΩ Maximum Count 4,294,967,285 (32 bits) Maximum Input Frequency 500 Hz Minimum Pulse Width 1 ms Overvoltage Protection 70 Vdc Power Relay Channels Type Power relay, form A (SPST N.O.) Operating Voltage Range 250 Vac/30 Vdc Maximum Load Current 5.0A/channel at 25°C Operate Time 6 ms (typical) Release Time 3 ms (typical) Electrical Life (Resistive Load) 5A 250 Vac 30,000 ops (10 ops/minute) at 75°C 5A 30 Vdc 70,000 ops (10 ops/minute) at 75°C 5A 250 Vac/30 Vdc 6,000 ops. 3A 250 Vac/30 Vdc 100,000 ops. 3A 250 Vac/30 Vdc 100,000 ops.	Contact			Wet contact	
Off Voltage Level 4 Vdc maximum	Sink/Source	(NF	PN/PNP)	Sink/source	
Maximum Count Maximum Maximum Maximum Substitute Substitute Maximum Substitute	On Voltage	Leve	· I	10 to 50 Vdc	
Maximum Count Maximum Input Frequency Minimum Pulse Width Overvoltage Protection Counters Type Operating Voltage Range Release Time Electrical Life (Resistive Load) Waximum Count Maximum Joad Current Operating Voltage Range VDE Maximum Load Current South A (SPST N.O.) A 250 Vac/30 Vdc South A (SPST N.O.) A 250 Vac 30,000 ops (10 ops/minute) at 75°C South A 250 Vac/30 Vdc 6,000 ops (10 ops/minute) at 75°C South A 250 Vac/30 Vdc 6,000 ops (10 ops/minute) at 75°C South A 250 Vac/30 Vdc 6,000 ops (10 ops/minute) at 75°C South A 250 Vac/30 Vdc 6,000 ops (10 ops/minute) at 75°C South A 250 Vac/30 Vdc 6,000 ops (10 ops/minute) at 75°C South A 250 Vac/30 Vdc 6,000 ops (10 ops/minute) at 75°C South A 250 Vac/30 Vdc 100,000 ops (10 ops/minute) at 75°C	Off Voltage	Leve	el	4 Vdc maximum	
Counters	Input Imped	lanc	е	10 kΩ	
Input Frequency Minimum Pulse Width To Vdc				4,294,967,285 (32 bits)	
Pulse Width 1 ms 70 Vdc	Counters	Inp	ut	500 Hz	
Power Relay 6				1 ms	
Channels 6 Power relay, form A (SPST N.O.)	Overvoltage	Pro	tection	70 Vdc	
Power relay, form A (SPST N.O.) Operating Voltage Range	Power Relay	y			
Operating Voltage Range 250 Vac/30 Vdc Maximum Load Current 5.0A/channel at 25°C Operate Time 6 ms (typical) Release Time 5A 250 Vac 30,000 ops (10 ops/minute) at 75°C Electrical Life (Resistive (Resistive Load) 5A 250 Vac/30 Vdc 6,000 ops (10 ops/minute) at 75°C Load) 5A 250 Vac/30 Vdc 6,000 ops (3A 250 Vac/30 Vdc 100,000 ops (3A 250 Vac/30 Vd	Channels			-	
Solution Solution	Туре			Power relay, form A (SPST N.O.)	
Operate Time 6 ms (typical) Release Time 3 ms (typical) 5A 250 Vac 30,000 ops (10 ops/minute) at 75°C 5A 30 Vdc 70,000 ops (10 ops/minute) at 75°C 5A 250 Vac/30 Vdc 6,000 ops (3A 250 Vac/30 Vdc 6,000 ops.) 3A 250 Vac/30 Vdc 100,000 ops.	Operating Voltage Range			250 Vac/30 Vdc	
Sample S	Maximum Load Current		Current	5.0A/channel at 25°C	
VDE SA 250 Vac 30,000 ops (10 ops/minute) at 75°C	Operate Time			6 ms (typical)	
VDE (10 ops/minute) at 75°C	Release Tim	ne .		, , ,	
Load) 5A 250 Vac/30 Vdc 6,000 ops. 3A 250 Vac/30 Vdc 100,000 ops.		ife	fe	(10 ops/minute) at 75°C 5A 30 Vdc 70,000 ops	
20,000,000 and at no load	Load)			5A 250 Vac/30 Vdc 6,000 ops. 3A 250 Vac/30 Vdc 100,000	
(300 ops./minute)	Mechanical Life				
Power-on Value Yes, programmable	Power-on Value			Yes, programmable	
Safe Value Yes, programmable	Safe Value				

For DC loads Diode Varistor 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

Model No.	Description	
OME-ET-7060	6-channel power relay output and DI module	
OME-PET-7060	6-channel power relay output and DI 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)	



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

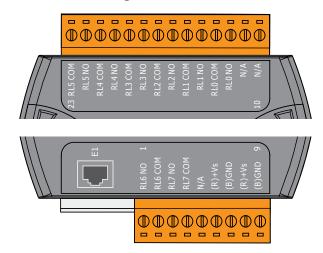
- **∠** Building Automation
- ✓ Factory Automation
- ✓ Machine Automation
- **✓** Remote Maintenance
- ✓ Remote Diagnosis
- ✓ Testing Equipment



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.

Pin Assignments





System Specifications

Models	OME-ET-7067	OME-PET-7067
Software		
Built-in Web Server	Y	'es
Web HMI	Y	'es
I/O Pair Connection	Y	es es
Communication		
Ethernet Port		X with auto MDI/ DI-X
PoE	_	Yes
Protocol	MODBUS TCP,	MODBUS UDP
Security	ID, passwor	d and IP filter
Dual Watchdog		(0.8 seconds), (programmable)
LED Indicators		
L1 (System Running)	Y	es es
L2 (Ethernet Link/Act)	Y	es es
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 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	2.9 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	

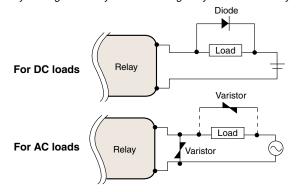
I/O Specifications

•		
Power Relay		
Channels		8
Туре		Power relay, form A (SPST N.O.)
Operating Voltage Range	;	250 Vac/30 Vdc
Max. Load Curren	it	5.0A/channel at 25°C
Operate Time		6 ms (typical)
Release Time		3 ms (typical)
	VDE	5A 250 Vac 30,000 ops (10 ops/minute) at 75°C
Electrical Life (Resistive Load)		5A 30 Vdc 70,000 ops (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 To other RLx.NO To other channels	RLx.COM Relay Open RLx.NO To other 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
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Model No.	Description	
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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.