Web-Based Intelligent PAC Controllers

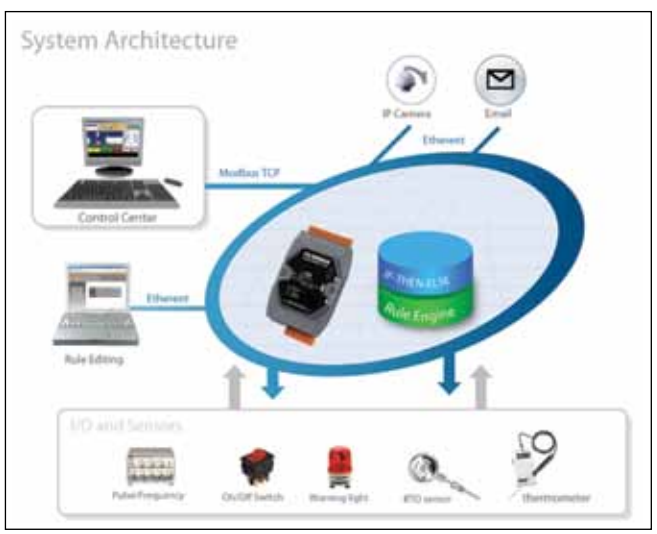
OME-WISE-7000 Series

1 YEAR WARRANTY

- No Programming Required (Dramatically Reduce Labor and System Development Cost)
- No Extra Software Tool Required (All Operations Can Be Done Through the Web Browser)
- IF-THEN-ELSE Logic Rules Execution Ability
- Extra Timer Function for Periodic Operation
- Real Time Message Sending Via Email
- CGI Command Sending for Interaction with Surveillance Systems
- Recipe Function Provided for Easy Operations of Group Actions
- Advanced P2P Function Provided (OME-WISE-7000 Controllers in Network can Freely Share I/O Status)
- MODBUS® TCP Protocol Provided for Seamless Integration with SCADA Package
- Wide Range of I/O Modules Provided–Allows Users to Find Best Solutions
- PoE (Power Over Ethernet) for Simplifying System Design, Reducing Cable and Saving Space

OME-WISE-7115 shown actual size.

OME-WISE-7000 Series (Web Inside, Smart Engine) is a product series that functions as control units for use in remote logic control and monitoring in various industrial applications. OME-WISE-7000 Series offers a user-friendly and intuitive web site interface that allows users to implement IF-THEN-ELSE control logic on controllers just a few clicks away; no programming is required. With its powerful and easy-to-use features, it will minimize the learning curve, shorten time to market and dramatically reduce the labor and cost spent on system development.



Applications

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

Through a Web browser, users can access the Web Server on OME-WISE-7000 Series controllers to perform tasks such as logic rule edition and download. A Rule Engine will be set up to manage and deploy logic rules for controllers. The Rule Engine will check whether the rules are valid or not and determine the execution of actions under specific conditions, for examples: setting up I/O channel values, perform timer tasks, sending Email message or sending CGI command under a specific condition. With the Advanced P2P function, all OME-WISE-7000 Series controllers in network can freely share their status such as AIO value, DIO value, DIO Counter value or Internal Register value to each others. This function greatly enhances the flexibility and boosts accuracy to the logic rule design and makes it easy to enable the interactions between the controllers. In addition, through MODBUS/TCP Protocol, a SCADA package enables control and monitoring of I/O channels or system status on OME-WISE-7000 Series controller in real time.

OMEGACARE℠ Extended Warranty Program

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.

Features

IF-THEN-ELSE Logic Rules Execution Ability

OME-WISE-7000 Series controllers are equipped with an IF-THEN-ELSE logic Rule Engine, it offers up to 36 IF-THEN-ELSE rules for users to set up the logic content. After completing rule edition and downloading rules to the OME-WISE-7000 controller, the Rule Engine will loop execute the rules in accordance with the execute order under specific conditions.

No Extra Software Tool is Required

OME-WISE-7000 Series HMI interface runs on regular Web browsers. To edit control logic, it only requires a browser to connect to the Web server on OME-WISE-7000 controller. No extra software tool installation is needed on the target PC.

No More Programming

OME-WISE-7000 provides user-friendly Web UI pages for editing control logic on the controllers. It enables to implement logic edition by a few clicks on the mouse to set up and deploy logic rules without writing a single line of code.

Recipe Function for Grouping a Series of Actions

In addition to 3 THEN Actions and 3 ELSE Actions settings OME-WISE-7000 Series provides for each Rule, Recipe function is provided for easily grouping a series of Actions. A series of actions can be stored and saved in a Recipe action and will be executed when the IF-THEN-ELSE condition is matched.

Timer Operation

OME-WISE-7000 Series features a timer function: It allows the user to perform specific tasks such as time delay.

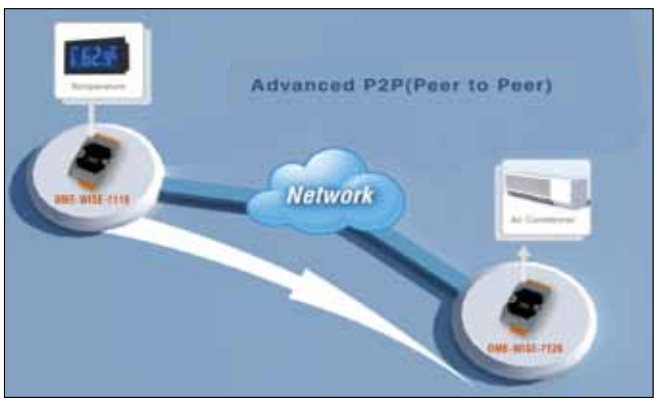
Remote Monitoring and Alarm via Email

OME-WISE-7000 supports Email functions for real-time message communication. The sending action can be added to the logic edition as part of logic control to provide real-time message transmission function.

CGI Command Sending for Surveillance System Integration

OME-WISE-7000 provides CGI commands sending function. It provides integrated access to a wide variety of Web devices and Surveillance systems.

Advanced P2P for Controller's Resource Sharing



Each OME-WISE-7000 controller can communicate with 8 remote OME-WISE-7000 controllers. The Advanced P2P function provided by OME-WISE-7000 is far more superior than the traditional P2P (DI-DO mapping) function, all OME-WISE-7000 controllers can freely share their status such as AIO channel value, DIO channel value, DI/DO Counter value or Internal Register value to each others, therefore, greatly enhances the flexibility and boosts accuracy to the logic rule design and makes it easy to enable the interactions between the controllers.

Offer Various Options for Channel Settings

OME-WISE-7000 offers various options for channel settings; for example: noise filter for DI signals, deadband setting for AI signals, linear scale setting, temperature degree in Celsius or Fahrenheit setting, power on value setting for DO channel, pulse output setting and DI/DO counter setting, etc.

Seamless Integration with SCADA

OME-WISE-7000 supports MODBUS TCP Protocol for users to perform real-time monitoring and control of the controllers. Through MODBUS TCP, it allows a SCADA package to seamlessly integrate with OME-WISE-7000 and enables total solutions for remote monitoring and control.

IF Conditions	
DI Channel	ON, OFF, ON to OFF, OFF to ON, Change
AI Channel	=, >, <, >=, <= (value)
Internal Register	
DI Counter	=, >, <, >=, <= (value), Change
DO Counter	
Timer	Timeout, Not Timeout
P2P	DI, AI, DI counter, DO counter, IR
Rule Status	Enable, Disable

OME-WISE IF-THEN-ELSE Rule Engine

THEN / ELSE Actions	
DO Channel	ON, OFF, Pulse Output
AO Channel	Change the value
Internal Register	
DI Counter	Reset
DO Counter	
Timer	Start ` Stop
Email	Send
CGI Commands	
Recipe	Execute
P2P	DO(On/Off), AO, IR
Rule Status	Enable, Disable

SPECIFICATIONS

Hardware						
OME-WISE-71xx Intelligent I/O Controller						
Model		 **OME-WISE-7115**	 **OME-WISE-7117**	 **OME-WISE-7118Z**	 **OME-WISE-7119**	 **OME-WISE-7126**
OS		MiniOS7				
Built-in Software		OME-WISE firmware				
CPU		16-bit CPU				
Ethernet Port		10/100 Base-TX with PoE (Power over Ethernet)				
I/O Channel	**DI**	—	—	—	—	2
	DO	—	4	6	4	2
	AI	7	8	10	8	6
	AO	—	—	—	—	2
Over Voltage Protection		—	240 Vrms	240 Vrms	240 Vrms	240 Vrms
Note		* Support RTD	—	* Also support thermocouple input		—

Model		 **OME-WISE-7144**	 **OME-WISE-7151**	 **OME-WISE-7152**	 **OME-WISE-7160**	 **OME-WISE-7167**
OS		MiniOS7				
Built-in Software		OME-WISE firmware				
CPU		16-bit CPU				
Ethernet Port		10/100 Base-TX with PoE (Power over Ethernet)				
I/O Channel	**DI**	8	16	8	6	—
	DO	8 (Sink Type)	—	8 (Source Type)	6 (Power Relay)	8 (Power Relay)
Note		* DI for sink and source type				

Software

Rule Configuration Website: Yes
I/O Function Supported: Built-in
36 IF-THEN-ELSE Logic Rule Supported: Yes
48 Internal Register Supported: Yes
12 Timer Supported: Yes
12 Email Supported: Yes
12 CGI Commands Supported: Yes
12 Recipe Supported: Yes
8 P2P Supported: Yes
Modbus TCP Protocol: Yes

7-Channel RTD Input with 3-Wire RTD Lead Resistance Elimination PoE Module

OME-WISE-7115

1 YEAR WARRANTY

- **Built-In Web Server for IF-THEN-ELSE Rule Setting**
- **Built-In IF-THEN-ELSE Rule Engine for Logic Operation**
- **No Programming Required**
- **Support IO, Counter, Timer, Email Operations**
- **MODBUS®/TCP Protocol for SCADA Software Seamless Integration**
- **IEEE 802.3af-Compliant Power Over Ethernet (PoE)**
- **10/100 Base-TX Ethernet**
- **AI Type: 7 RTD (Pt100, Pt1000, Ni120, Cu100, Cu1000)**
- **Individual Channel Configuration**
- **3-Wire RTD Input with Lead Resistance Elimination**
- **2-Way Isolation/ESD Protection**

OME-WISE-7115 shown actual size.

OME-WISE-7000 (Web Inside, Smart Engine) is a product series that functions as control units for use in remote logic control and monitoring in various industrial applications. The OME-WISE-7000 Series offers a user-friendly and intuitive web site interface that allows users to implement IF-THEN-ELSE control logic on controllers just a few clicks away; no programming is required. With its powerful and easy-to-use features, it will minimize the learning curve, shorten time to market and dramatically reduce the labor and cost spent on system development.

OME-WISE-7115 follows IEEE 802.3af-compliant (classification, Class 1) Power over Ethernet (PoE) specification. It allows receiving power from PoE enabled network by Ethernet pairs (Category 5 Ethernet cable). This feature provides greater flexibility and higher efficiency therefore simplifying systems design, saving space, reducing cables and eliminating the requirement for dedicated electrical outlets. Meanwhile, in case under a non-PoE environment, OME-WISE-7115 will still be able to receive power from auxiliary power sources like AC adapters or battery, etc.

This OME-WISE-7115 module supports MODBUS/TCP protocol to make seamless integration with SCADA software available. It features 16-bit, 7-channel RTD inputs. Each channel is allowed to configure an individual range that supports 3-wire RTD lead resistance elimination and open wire detection for RTD measurement.

SPECIFICATIONS

I/O

RTD Input

Input Channels: 7 (differential)
Sensor Type: Pt100, Pt1000, Ni120, Cu100, Cu1000
Wire Connection: 2/3 wire
Resolution: 16-bit
Sampling Rate: 12 sample/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
Individual Channel Configuration: Yes
3-Wire RTD Lead Resistance Elimination: Yes

System

CPU: 16-bit CPU
SRAM: 512KB
Flash Memory: 512KB
EEPROM: 16KB
Watchdog: Yes

Communication

PoE Ethernet Port: 10/100 Base-TX and automatic MDI/MDI-X

2-Way Isolation

I/O: 2500 Vac

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

LED Indicators
PoE: PoE On
L1: System running
L2: Ethernet link/act
L3: Ethernet 10/100 M speed

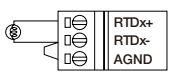
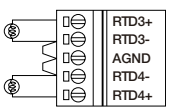
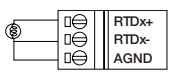
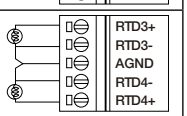
Power Requirements
Reverse Polarity Protection: Yes
Powered from Terminal Block: Yes, 12 to 48 Vdc
Powered from PoE: Yes, IEEE 802.3af, Class1
Consumption: 2.6 W

Mechanical
Dimensions: 72 W x 123 L x 35 mm D (2.8 x 4.8 x 1.38")
Installation: DIN-rail or wall mounting

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

Software Functions
36 IF-THEN-ELSE Logic Rules: 3 IF conditions with AND or OR operators; 3 THEN actions; 3 ELSE actions
48 Internal Registers: Hold temporary variables and read/write data via MODBUS/TCP address
12 Timers: Delay/timing functions
12 Emails: Send email messages to pre-set email receivers
12 CGI Commands: Send pre-set CGI commands
12 Recipes: Set up THEN/ELSE action groups
8 P2P Remote Modules: Set up the connection information for the remote OME-WISE-7000 modules
Rule Configuration Website: Access Web server on OME-WISE-7000 controllers to edit and upload logic rules through web browser
MODBUS/TCP Protocol: Real time control and monitoring I/O channels and system status of controllers via SCADA software

WIRE CONNECTION

	CH0, 1, 2, 5 and 6	CH3 and CH4
2-Wire of RTD		
3-Wire of RTD		

Terminal No.	Pin Assignment
E1	RJ-45 
01	RTD5+
02	RTD5-
03	AGND
04	RTD6+
05	RTD6-
06	AGND
07	N.C.
08	(R)+Vs
09	(B)GND

OME-WISE IF-THEN-ELSE Rule Engine

IF Conditions	
AI Channel Internal Register	=, >, <, >=, <= (value)
Timer	Timeout, Not Timeout
P2P	DI, AI, DI counter, DO counter, IR
Rule Status	Enable, Disable

THEN / ELSE Actions	
Internal Register	Change the value
Timer	Start, Reset
Email CGI Commands	Send
Recipe	Execute
P2P	DO(On/Off), AO, IR
Rule Status	Enable, Disable

Terminal No.	Pin Assignment
23	RTD4+
22	RTD4-
21	AGND
20	RTD3-
19	RTD3+
18	AGND
17	RTD2-
16	RTD2+
15	AGND
14	RTD1-
13	RTD1+
12	AGND
11	RTD0-
10	RTD0+

To Order *Visit omega.com/ome-wise-7000_series for Pricing and Details*

Model No.	Description
OME-WISE-7115	7-channel RTD input with 3-wire RTD lead resistance elimination 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 @ 850 mA
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-WISE-7115 *7-channel RTD input with 3-wire RTD lead resistance elimination PoE module, and* ***OCW-1***
OMEGACARE℠ extends standard 1-year warranty to a total of 2 years.

8-Channel Analog Input with High Voltage Protection and 4-Channel Isolated Output PoE Module

OME-WISE-7117

- Built-In Web Server for IF-THEN-ELSE Rule Setting
- Built-In IF-THEN-ELSE Rule Engine for Logic Operation
- No Programming Required
- Support IO, Counter, Timer, Email Operations
- MODBUS®/TCP Protocol for SCADA Software Seamless Integration
- IEEE 802.3af-Compliant Power Over Ethernet (PoE)
- 10/100 Base-TX Ethernet
- AI Type: 8 Differential (mV, V, mA)
- DO Type: 4 Open Collector Outputs
- Over Voltage Protection is up to 240 Vrms
- 2-Way Isolation/ESD Protection

OME-WISE-7117 shown actual size.

OME-WISE-7000 (Web Inside, Smart Engine) is a product series that functions as control units for use in remote logic control and monitoring in various industrial applications. OME-WISE-7000 Series offers a user-friendly and intuitive web site interface that allows users to implement IF-THEN-ELSE control logic on controllers just a few clicks away; no programming is required. With its powerful and easy-to-use features, it will minimize the learning curve, shorten time to market and dramatically reduce the labor and cost spent on system development.

OME-WISE-7117 follows IEEE 802.3af-compliant (classification, Class 1) Power over Ethernet (PoE) specification. It allows receiving power from PoE enabled network by Ethernet pairs (Category 5 Ethernet cable). This feature provides greater flexibility and higher efficiency therefore simplifying systems design, saving space, reducing cables and eliminating the requirement for dedicated electrical outlets. Meanwhile, in case under a non-PoE environment, OME-WISE-7117 will still be able to receive power from auxiliary power sources like AC adapters or battery, etc.

This multi-function OME-WISE-7117 module supports MODBUS/TCP protocol to make seamless integration with SCADA software available. It features 16-bit, 8-channel differential analog inputs and 4-channel digital ouputs. Each analog channel is allowed to configure an individual range and has 240Vrms high over voltage protection. Jumper selectable for voltage or current input.

Specifications

Analog Input
- **Input Channels:** 8 (differential)
- **Input Type:** ±150 mV, ±500 mV, ±1V, ±5V, ±10V ±20 mA, 0 to 20 mA, 4 to 20 mA (jumper selectable)
- **Resolution:** 16-bit
- **Sampling Rate:** 10 sample/second (total)
- **Accuracy:** ±0.1%
- **Zero Drift:** ±20 µV/°C
- **Span Drift:** ±25 ppm/°C
- **Overvoltage Protection:** 240 Vrms

Input Impedance
- **Voltage:** 2 MΩ
- **Current:** 125 MΩ
- **Common Mode Rejection:** 86 dB minimum
- **Normal Mode Rejection:** 100 dB
- **Individual Channel Configuration:** Yes

Digital Output
- **Output Channels:** 4
- **Output Type:** Isolated open collector (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

System
- **CPU:** 16-bit CPU
- **SRAM:** 512KB
- **Flash Memory:** 512KB
- **EEPROM:** 16KB
- **Dual Watchdog:** Yes

Communication
- **PoE Ethernet Port:** 10/100 Base-TX and automatic MDI/MDI-X

2-Way Isolation
- **I/O:** 2500 Vdc

EMS Protection
- **ESD (IEC 61000-4-2):** 4 kV contact for each terminal and 8 kV for Air for random point
- **EFT (IEC 61000-4-4):** ±4 kV for power

NEW

LED Indicators
PoE Power: PoE on
L1: System running
L2: Ethernet link/act
L3: Ethernet 10/100 M speed

Power Requirements
Reverse Polarity Protection: Yes
Powered from Terminal Block: Yes, 12 to 48 Vdc
Powered from PoE: Yes, IEEE 802.3af, Class1
Consumption: 3.1 W

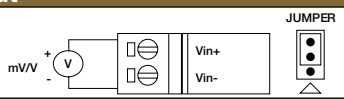
Mechanical
Dimensions: 72 W x 123 L x 35 mm D (2.83 x 4.84 x 1.37")
Installation: DIN-rail or wall mounting

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

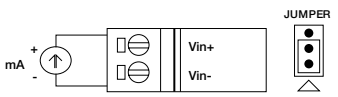
Software Functions
Rule Configuration Website: Access Web server on OME-WISE-7000 controllers to edit and upload logic rules through web browser
36 IF-THEN-ELSE Logic Rules: 3 IF conditions with AND or OR operators; 3 THEN actions and 3 ELSE actions
48 Internal Registers: Hold temporary variables and read/write data via
12 Timers: Delay/Timing functions.
12 Emails: Send Email messages to pre-set email receivers
12 CGI Commands: Send pre-set CGI commands
12 Recipes: Set up THEN/ELSE action groups
8 P2P Remote Modules: Set up the connection information for the remote OME-WISE-7000 modules
MODBUS/TCP Protocol: Real time control and monitoring I/O channels and system status of controllers via SCADA software

WIRE CONNECTION

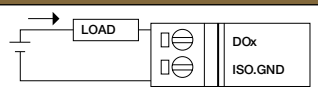
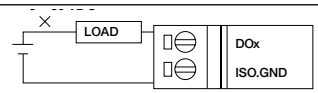
Voltage Input



Current Input



Digital Output

ON State Readback as 1	
OFF State Readback as 0	

IF Conditions	
AI Channel	=, >, <, >=, <= (value)
Internal Register	
Timer	Timeout, Not Timeout
P2P	DI, AI, DI counter, DO counter, IR
Rule Status	Enable, Disable

OME-WISE IF-THEN-ELSE Rule Engine

THEN / ELSE Actions	
DO Channel	ON, OFF, Pulse Output
Internal Register	Change the value
DO Counter	Reset
Timer	Start, Reset
Email	Send
CGI Commands	
Recipe	Execute
P2P	DO(On/Off), AO, IR
Rule Status	Enable, Disable

Terminal No.	Pin Assignment
E1	RJ-45
01	Vin7+
02	Vin7-
03	DO0
04	DO1
05	DO2
06	DO3
07	ISO.GND
08	(R)+Vs
09	(B)GND

Terminal No.	Pin Assignment
23	Vin6-
22	Vin6+
21	Vin5-
20	Vin5+
19	Vin4-
18	Vin4+
17	Vin3-
16	Vin3+
15	Vin2-
14	Vin2+
13	Vin1-
12	Vin1+
11	Vin0-
10	Vin0+

To Order *Visit omega.com/ome-wise-7000_series for Pricing and Details*

Model No.	Description
OME-WISE-7117	8-channel analog input with high voltage protection and 4-channel isolated output 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 @ 850 mA
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-WISE-7117 *8-channel analog input with high voltage protection and 4-channel isolated output PoE module, and* ***OCW-1*** *OMEGACARE℠ extends standard 1-year warranty to a total of 2 years.*

10-Channel Thermocouple Input with High Voltage Protection and 6-Channel Isolated Output PoE Module

OME-WISE-7118Z

1 YEAR WARRANTY

- Built-In Web Server for IF-THEN-ELSE Rule Setting
- Built-In IF-THEN-ELSE Rule Engine for Logic Operation
- No Programming Required
- Support IO, Counter, Timer, Email Operations
- MODBUS®/TCP Protocol for SCADA Software Seamless Integration
- IEEE 802.3af-Compliant Power Over Ethernet (PoE)
- 10/100 Base-TX Ethernet
- Support Current Input, Voltage Input and Thermocouple Input
- Over Voltage Protection is up to 240 Vrms
- 6-Channel Digital Outputs
- 2-Way Isolation/ESD Protection

OME-WISE-7118Z shown actual size.

OME-WISE-7000 (Web Inside, Smart Engine) is a product series that functions as control units for use in remote logic control and monitoring in various industrial applications. The OME-WISE-7000 Series offers a user-friendly and intuitive web site interface that allows users to implement IF-THEN-ELSE control logic on controllers just a few clicks away; no programming is required. With its powerful and easy-to-use features, it will minimize the learning curve, shorten time to market and dramatically reduce the labor and cost spent on system development.

OME-WISE-7118Z follows IEEE 802.3af-compliant (classification, Class 1) Power over Ethernet (PoE) specification. It allows receiving power from PoE enabled network by Ethernet pairs (Category 5 Ethernet cable). This feature provides greater flexibility and higher efficiency therefore simplifying systems design, saving space, reducing cables and eliminating the requirement for dedicated electrical outlets. Meanwhile, in case under a non-PoE environment, OME-WISE-7118Z will still be able to receive power from auxiliary power sources like AC adapters or battery, etc.

This multi-function module OME-WISE-7118Z supports MODBUS/TCP protocol to make seamless integration with SCADA software available. It features 16-bit, 10-channel differential analog inputs and 6-channel digital ouputs. Each analog channel is allowed to configure an individual range and has 240 Vrms high over voltage protection.

Specifications

Analog Input
- **Input Channels:** 10 (differential)
- **Input Type:** ±15 mV, ±50 mV, ±100 mV, ±500 mV, ±1 V, ±2.5 V, ±20 mA, 0 to 20 mA, 4 to 20 mA (requires optional external 125 Ω resistor), thermocouple (J, K, T, E, R, S, B, N, C, L, M, LDIN43710)
- **Resolution:** 16-bit
- **Sampling Rate:** 10 sample/second (total)
- **Accuracy:** ±0.1% or better
- **Zero Drift:** ±0.5 uV/°C
- **Span Drift:** ±25 ppm/°C
- **Overvoltage Protection:** 240 Vrms
- **Input Impedance:** >300 kΩ
- **Common Mode Rejection:** 150 dB minimum
- **Normal Mode Rejection:** 100 dB
- **Individual Channel Configuration:** Yes
- **Temperature Outputs Consistency:** Yes
- **Stable Temperature Output in The Field:** Yes
- **Open Wire Detection:** Yes

Digital Output
- **Output Channels:** 6
- **Output Type:** Isolated open collector (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

System
- **CPU:** 16-bit CPU
- **SRAM:** 512KB
- **Flash Memory:** 512KB
- **EEPROM:** 16KB
- **Watchdog:** Yes

Communication
- **PoE Ethernet Port:** 10/100 Base-TX and automatic MDI/MDI-X
- **2-Way Isolation**
- **I/O:** 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

LED Indicators
PoE Power: PoE on
L1: System running
L2: Ethernet link/act
L3: Ethernet 10/100 M speed

Power Requirements
Reverse Polarity Protection: Yes
Powered from Terminal Block: Yes, 12 to 48 Vdc
Powered from PoE: Yes, IEEE 802.3af, Class1
Consumption: 3.0 W

Mechanical
Dimensions: 72 W x 123 L x 35 mm D (2.8 x 4.8 x 1.38")

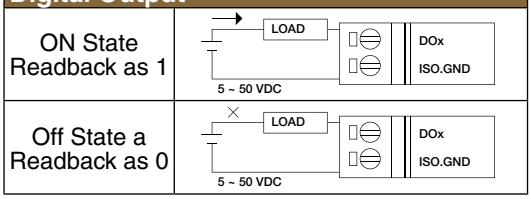
Installation: DIN-rail or wall mounting

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

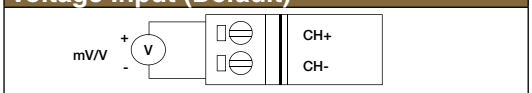
Software Functions
Rule Configuration Website: Access Web server on OME-WISE-7000 controllers to edit and upload logic rules through web browser
36 IF-THEN-ELSE Logic Rules: 3 IF conditions with AND or OR operators, 3 THEN actions and 3 ELSE actions
48 Internal Registers: Hold temporary variables and read/write data via MODBUS/TCP address
12 Timers: Delay / Timing functions
12 Emails: Send Email messages to pre-set Email receivers
12 CGI Commands: Send pre-set CGI commands.
12 Recipes: Set up THEN/ELSE action groups
8 P2P Remote Modules: Set up the connection information for the remote OME-WISE-7000 modules
MODBUS/TCP Protocol: Real time control and monitoring I/O channels and system status of controllers via SCADA software

WIRE CONNECTION

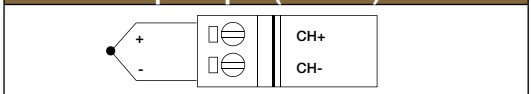
Digital Output



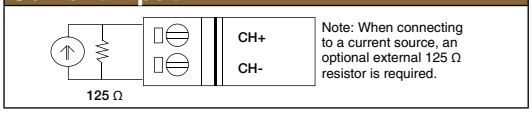
Voltage Input (Default)



Thermocouple Input (Default)



Current Input

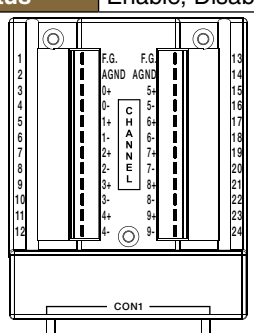


Terminal No.	Pin Assignment
E1	RJ-45
01	DO0
02	DO1
03	DO2
04	DO3
05	DO4
06	DO5
07	ISO.GND
08	(R)+Vs
09	(B)GND

IF Conditions	
AI Channel Internal Register	=, >, <, >=, <= (value)
DO Counter	=, >, <, >=, <= (value) Change
Timer	Timeout, Not Timeout
P2P	DI, AI, DI counter, DO counter, IR
Rule Status	Enable, Disable

OME-WISE IF-THEN-ELSE Rule Engine

THEN / ELSE Actions	
DO Channel	ON, OFF, Pulse Output
Internal Register	Change the value
DO Counter	Reset
Timer	Start, Stop
Email CGI Commands	Send
Recipe	Execute
P2P	CO (On/Off) AO, IR
Rule Status	Enable, Disable



To Order *Visit omega.com/ome-wise-7000_series for Pricing and Details*

Model No.	Description
OME-WISE-7118Z	10-channel thermocouple input with high voltage protection and 6-channel isolated output PoE module and daughter board
RAIL-35-1	35 mm (1.4") DIN rail, 1m (3.3') length
iDRN-PS-1000	DIN rail power supply, 95 to 240 Vac input, 24 Vdc output @ 850 mA
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-WISE-7118Z *10-channel thermocouple input with high voltage protection and 6-channel isolated output PoE module, daughter board, and* ***OCW-1*** *OMEGACARE℠ extends standard 1-year warranty to a total of 2 years.*

8-Channel Analog Input with High Voltage Protection and 4-Channel Isolated Output PoE Module

OME-WISE-7119

- Built-In Web Server for IF-THEN-ELSE Rule Setting
- Built-In IF-THEN-ELSE Rule Engine for Logic Operation
- No Programming Required
- Support IO, Counter, Timer, Email Operations
- MODBUS®/TCP Protocol for SCADA Software Seamless Integration
- IEEE 802.3af-Compliant Power Over Ethernet (PoE)
- 10/100 Base-TX Ethernet
- Support Current Input, Voltage Input and Thermocouple Input
- Over Voltage Protection is up to 240 Vrms
- 4-Channel Digital Outputs
- 2-Way Isolation/ESD Protection

OME-WISE-7119 shown smaller than actual size.

OME-WISE-7000 (Web Inside, Smart Engine) is a product series that functions as control units for use in remote logic control and monitoring in various industrial applications.OME-WISE-7000 Series offers a user-friendly and intuitive web site interface that allows users to implement IF-THEN-ELSE control logic on controllers just a few clicks away; no programming is required. With its powerful and easy-to-use features, it will minimize the learning curve, shorten time to market and dramatically reduce the labor and cost spent on system development.

OME-WISE-7119 follows IEEE 802.3af-compliant (classification, Class 1) Power over Ethernet (PoE) specification. It allows receiving power from PoE enabled network by Ethernet pairs (Category 5 Ethernet cable). This feature provides greater flexibility and higher efficiency therefore simplifying systems design, saving space, reducing cables and eliminating the requirement for dedicated electrical outlets. Meanwhile, in case under a non-PoE environment, OME-WISE-7119 will still be able to receive power from auxiliary power sources like AC adapters or battery, etc.

This multi-function module OME-WISE-7119 supports MODBUS/TCP protocol to make seamless integration with SCADA software available. It features 16-bit, 8-channel differential analog inputs and 4-channel digital ouputs. Each analog channel is allowed to configure an individual range and has 240 Vrms high over voltage protection.

Specifications

Analog Input
- **Input Channels:** 8 (differential)
- **Input Type:** ±15 mV, ±50 mV, ±100 mV, ±150 mV, ±500 mV, ±1 V, ±5 V, ±10 V, Thermocouple (J, K, T, E, R, S, B, N, C, L, M, LDIN43710) ±20 mA, 0 to 20 mA, 4 to 20 mA (jumper selectable)
- **Resolution:** 16-bit
- **Sampling Rate:** 10 sample/second (total)
- **Accuracy:** ±0.1% or better
- **Zero Drift:** ±10 µV/°C
- **Span Drift:** ±25 ppm/°C
- **Overvoltage Protection:** 240 Vrms

Input Impedance:
- **Voltage:** >1 MΩ
- **Current:** 125 Ω
- **Common Mode Rejection:** 86 dB minimum
- **Normal Mode Rejection:** 100 dB
- **Individual Channel Configuration:** Yes
- **Open Wire Detection:** Yes

Digital Output
- **Output Channels:** 4
- **Output Type:** Isolated open collector (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

System
- **CPU:** 16-bit CPU
- **SRAM:** 512KB
- **Flash Memory:** 512KB
- **EEPROM:** 16KB
- **Watchdog:** Yes

Communication
- **PoE Ethernet Port:** 10/100 base-TX and automatic MDI/MDI-X
- **2-Way Isolation**
- **I/O:** 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

NEW

LED Indicators
- **PoE Power:** PoE on
- **L1:** System running
- **L2:** Ethernet link/act
- **L3:** Ethernet 10/100 M speed

Power Requirements
- **Reverse Polarity Protection:** Yes
- **Powered from Terminal Block:** Yes, 12 to 48 Vdc
- **Powered from PoE:** Yes, IEEE 802.3af, Class1
- **Consumption:** 3.4 W

Mechanical
- **Dimensions:** 72 W x 123 L x 35 mm 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

Software Functions
- **Rule Configuration Website:** Access Web server on OME-WISE-7000 controllers to edit and upload logic rules through web browser
- **36 IF-THEN-ELSE Logic Rules:** 3 IF conditions with AND or OR operators, 3 THEN actions and 3 ELSE actions
- **48 Internal Registers:** Hold temporary variables and read/write data via MODBUS/TCP address
- **12 Timers:** Delay/timing functions
- **12 Emails:** Send email messages to pre-set email receivers
- **12 CGI Commands:** Send pre-set CGI commands
- **12 Recipes:** Set up THEN/ELSE action groups
- **8 P2P Remote Modules:** Set up the connection information for the remote OME-WISE-7000 modules
- **MODBUS/TCP Protocol:** Real time control and monitoring I/O channels and system status of controllers via SCADA software

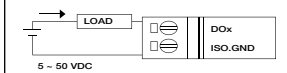
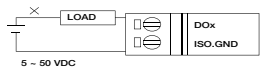
WIRE CONNECTION

Thermocouple Input

Voltage Input

Current Input

Digital Output

ON State Readback as 1	
Off State a Readback as 0	

IF Conditions	
AI Channel Internal Register	=, >, <, >=, <= (value)
DO Counter	=, >, <, >=, <= (value) Change
Timer	Timeout, Not Timeout
P2P	DI, AI, DI counter, DO counter, IR
Rule Status	Enable, Disable

OME-WISE IF-THEN-ELSE Rule Engine

THEN / ELSE Actions	
DO Channel	ON, OFF, pulse output
Internal Register	Change the value
DO Counter	Reset
Timer	Start, Stop
Email CGI Commands	Send
Recipe	Execute
P2P	CO (On/Off) AO, IR
Rule Status	Enable, Disable

Terminal No.	Pin Assignment
E1	RJ-45
01	Vin7+
02	Vin7-
03	DO0
04	DO1
05	DO2
06	DO3
07	ISO.GND
08	(R)+Vs
09	(B)GND

Terminal No.	Pin Assignment
23	Vin6-
22	Vin6+
21	Vin5-
20	Vin5+
19	Vin4-
18	Vin4+
17	Vin3-
16	Vin3+
15	Vin2-
14	Vin2+
13	Vin1-
12	Vin1+
11	Vin0-
10	Vin0+

To Order *Visit omega.com/ome-wise-7000_series for Pricing and Details*

Model No.	Description
OME-WISE-7119	8-channel universal input with high voltage protection and 4-channel isolated output 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 @ 850 mA
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-WISE-7119 *8-channel universal input with high voltage protection and 4-channel isolated output PoE module, and* ***OCW-1*** *OMEGACARE℠ extends standard 1-year warranty to a total of 2 years.*

6-Channel Analog Input, 2-Channel Analog Output, 2-Channel Digital Input, 2-Channel Digital Output PoE Module

OME-WISE-7126

- **Built-In Web Server for IF-THEN-ELSE Rule Setting**
- **Built-In IF-THEN-ELSE Rule Engine for Logic Operation**
- **No Programming Required**
- **Support IO, Counter, Timer, Email Operations**
- **MODBUS®/TCP Protocol For SCADA Software Seamless Integration**
- **IEEE 802.3af-Compliant Power Over Ethernet (PoE)**
- **10/100 Base-TX Ethernet**
- **AI: 6 (mV, V, mA)**
- **AO: 2 (V, mA)**
- **DO: 2 (Open Collector Output)**
- **DI: 2 (Dry+Wet)**

OME-WISE-7126 shown smaller than actual size.

OME-WISE-7000 (Web Inside, Smart Engine) is a product series that functions as control units for use in remote logic control and monitoring in various industrial applications. The OME-WISE-7000 Series offers a user-friendly and intuitive web site interface that allows users to implement IF-THEN-ELSE control logic on controllers just a few clicks away; no programming is required. With its powerful and easy-to-use features, it will minimize the learning curve, shorten time to market and dramatically reduce the labor and cost spent on system development.

OME-WISE-7126 follows IEEE 802.3af-compliant (classification, Class 1) Power over Ethernet (PoE) specification. It allows receiving power from PoE enabled network by Ethernet pairs (Category 5 Ethernet cable). This feature provides greater flexibility and higher efficiency therefore simplifying systems design, saving space, reducing cables and eliminating the requirement for dedicated electrical outlets. Meanwhile, in case under a non-PoE environment, OME-WISE-7126 will still be able to receive power from auxiliary power sources like AC adapters or battery, etc.

This multi-function module OME-WISE-7126 supports MODBUS/TCP protocol to make seamless integration with SCADA software available. It features 6-channel analog inputs, 2-channel analog outputs, 2-channel digital inputs and 2-channel digital outputs. Each analog input channel provides 240 Vrms high over voltage protection.

Specifications

Analog Input
- **Input Channels:** 6 (differential)
- **Input Type:** ±500 mV, ±1 V, ± 5 V, ±10 V, ±20 mA, 0 to 20 mA, 4 to 20 mA
- **Resolution:** 16-bit
- **Sampling Rate:** 10 sample/second (total)
- **Accuracy:** ±0.1%
- **Zero Drift:** ±20 µV/°C
- **Span Drift:** ±25 ppm/°C
- **Overvoltage Protection:** 240 Vrms
- **Input Impedance:** Voltage: 2 MΩ; Current: 125Ω
- **Common Mode Rejection:** 86 dB minimum
- **Normal Mode Rejection:** 100 dB
- **Individual Channel Configuration:** Yes

Analog Output
- **Output Channels:** 2
- **Output Type:** 0 to 5 Vdc, ±5 Vdc, 0 to 10 Vdc, ±10 Vdc, 0 to 20 mA, 4 to 20 mA (jumper selectable)
- **Individual Channel Configuration:** Yes
- **Resolution:** 12-bit
- **Accuracy:** ±0.1% of FSR
- **Voltage Output Capability:** 20 mA@10 V
- **Current Load Resistance:** 500 Ω
- **Open Wire Detection:** Yes, for 4 to 20 mA only

Digital Input
- **Input Channels:** 2
- **Dry Contact (Source)**
  - **On Voltage Level:** Close to ground
  - **Off Voltage Level:** Open
- **Effective Distance for Dry Contact:** 500M maximum
- **Wet Contact (Sink/Source)**
  - **On Voltage Level:** 1 Vdc maximum
  - **Off Voltage Level:** 3.5 to 30 Vdc
- **Counters**
  - **Channels:** 2
  - **Maximum Counts:** 16-bit (65535)
  - **Maximum Input Frequency:** 50 Hz
  - **Minimum Pulse Width:** 10 ms
- **Open Wire Detection:** 30 Vdc

Digital Output
- **Output Channels:** 2
- **Output Type:** Isolated open collector (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

System
- **CPU:** 16-bit
- **SRAM:** 512KB
- **Flash Memory:** 512KB
- **EEPROM:** 16KB
- **Watchdog:** Yes

Communication
PoE Ethernet Port: 10/100 Base-TX and automatic MDI/MDI-X
2-Way Isolation
I/O: 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
LED Indicators
PoE Power: PoE on
L1: System running
L2: Ethernet link/act
L3: Ethernet 10/100 M Speed
Power Requirements
Reverse Polarity Protection: Yes
Powered from Terminal Block: Yes, 12 to 48 Vdc
Powered from PoE: Yes, IEEE 802.3af, Class1
Consumption: 4.2W
Mechanical
Dimensions: 72 W x 123 L x 35 mm D (2.83 x 4.84 x 1.38)
Installation: DIN-rail or wall mounting
Environment
Operating Temperature: -25 to 75°C
Storage Temperature: -30 to 80°C
Humidity: 10 to 90% RH, non-condensing

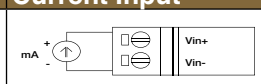
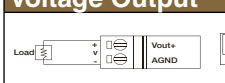
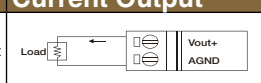
Software Functions
Rule Configuration Website: Access Web server on OME-WISE-7000 controllers to edit and upload logic rules through web browser
36 IF-THEN-ELSE Logic Rules: 3 IF conditions with AND or OR operators, 3 THEN actions and 3 ELSE actions
48 Internal Registers: Hold temporary variables and read/write data via MODBUS/TCP address
12 Timers: Delay/timing functions
12 Emails: Send email messages to pre-set Email receivers
12 CGI Commands: Send pre-set CGI commands
12 Recipes: Set up THEN/ELSE action groups
8 P2P Remote Modules: Set up the connection information for the remote OME-WISE-7000 modules
MODBUS/TCP Protocol: Real time control and monitoring I/O channels and system status of controllers via SCADA software

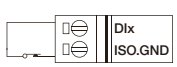
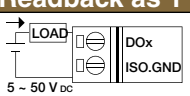
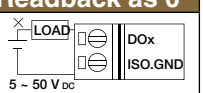
IF Conditions	
DI Channel	NO, OFF, ON to OFF, OFF to ON, Change
AI Channel	=, >, <, >=, <= (value)
Internal Register	
DI Counter	=, >, <, >=, <= (value) Change
DO Counter	
Timer	Timeout, Not Timeout
P2P	DI, AI, DI counter, DO counter, IR
Rule Status	Enable, Disable

OME-WISE IF-THEN-ELSE Rule Engine

THEN / ELSE Actions	
DO Channel	ON, OFF, Pulse Output
AO Channel	Change the value
Internal Register	
DI Counter	Reset
DO Counter	
Timer	Start, Reset
Email	Send
CGI Commands	
Recipe	Execute
P2P	DO (On/Off), AO, IR
Rule Status	Enable, Disable

WIRE CONNECTION

Voltage Input	Current Input
	
Voltage Output	**Current Output**
	

Digital Input	ON State/ Readback as 1	OFF State/ Readback as 0
Dry Contact		
Digital Output	**ON State/ Readback as 1**	**OFF State/ Readback as 0**
Open Collector (Sink)		

Terminal No.	Pin Assignment
E1	RJ-45
01	Vout1+
02	AGND
03	DO0
04	DO1
05	DIO
06	DI1
07	ISO.GND
08	+Vs
09	GND

Terminal No.	Pin Assignment
23	AGND
22	Vout0+
21	Vin5-
20	Vin5+
19	Vin4-
18	Vin4+
17	Vin3-
16	Vin3+
15	Vin2-
14	Vin2+
13	Vin1-
12	Vin1+
11	Vin0-
10	Vin0+

To Order *Visit omega.com/ome-wise-7000_series for Pricing and Details*

Model No.	Description
OME-WISE-7126	6-channel analog input, 2-channel analog output, 2-channel digital input and 2-channel digital output PoE module
RAIL-35-1	35 mm (1.4") DIN rail, 1m (3.3') length
iDRN-PS-1000	DIN rail power supply, 95 to 240 Vac input, 24 Vdc output @ 850 mA
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-WISE-7126 *6-channel analog input, 2-channel analog output, 2-channel digital input, and 2-channel digital output PoE module, and* ***OCW-1*** *OMEGACARE℠ extends standard 1-year warranty to a total of 2 years.*

8-Channel Isolated Sink Type Open Collector Output and 8-Channel Isolated Digital Input PoE Module

OME-WISE-7144

- Built-In Web Server for IF-THEN-ELSE Rule Setting
- Built-In IF-THEN-ELSE Rule Engine for Logic Operation
- No Programming Required
- Support IO, Counter, Timer, Email Operations
- MODBUS®/TCP Protocol for SCADA Software Seamless Integration
- IEEE 802.3af-Compliant Power Over Ethernet (PoE)
- 10/100 Base-TX Ethernet
- 2-Way Isolation/ESD Protection
- DO Type: 8 Isolated Open Collectors (Sink Type)
- DI Type: 8 Isolation Wet Contact (Sink/Source)

OME-WISE-7144 shown actual size.

OME-WISE-7000 (Web Inside, Smart Engine) is a product series that functions as control units for use in remote logic control and monitoring in various industrial applications. OME-WISE-7000 offers a user-friendly and intuitive web site interface that allows users to implement IF-THEN-ELSE control logic on controllers just a few clicks away; no programming is required. With its powerful and easy-to-use features, it will minimize the learning curve, shorten time to market and dramatically reduce the labor and cost spent on system development.

OME-WISE-7144 follows IEEE 802.3af-compliant (classification, Class 1) Power over Ethernet (PoE) specification. It allows receiving power from PoE enabled network by Ethernet pairs (Category 5 Ethernet cable). This feature provides greater flexibility and higher efficiency therefore simplifying systems design, saving space, reducing cables and eliminating the requirement for dedicated electrical outlets. Meanwhile, in case under a non-PoE environment, OME-WISE-7144 will still be able to receive power from auxiliary power sources like AC adapters or battery, etc.

This module OME-WISE-7144 supports MODBUS/TCP protocol to make seamless integration with SCADA software available. It features 8-channel isolated open collector outputs and 8-channel isolated wet contact digital inputs. Each output channel supports 300mA current driving 10 to 40 Vdc and each channel supports the counter function.

Specifications

Digital Input
- **Input Channels:** 8
- **Input Type:** Wet contact (sink, source)
- **On Voltage Level:** 10 to 50 Vdc
- **Off Voltage Level:** 4 Vdc maximum
- **Input Impedance:** 10 kΩ
- **Counters**
  - **Maximum Count:** 65535 (16 bits)
  - **Maximum Input Frequency:** 50 Hz
  - **Minimum Pulse Width:** 10 ms
- **Overvoltage Protection:** 70 Vdc

Digital Output
- **Output Channels:** 8
- **Output Type:** Isolated open collector (sink)
- **Maximum Load Current:** 300 mA/channel at 25°C, direct drive power relay module
- **Output Voltage:** 10 to 40 Vdc
- **Overvoltage Protection:** 60 Vdc
- **Overload Protection:** 1.1 A
- **Short-circuit Protection:** Yes

System
- **CPU:** 16-bit CPU
- **SRAM:** 512KB
- **Flash Memory:** 512KB
- **EEPROM:** 16KB
- **Watchdog:** Yes

Communication
- **PoE Ethernet Port:** 10/100 base-TX (with link, activity LED indicator) and automatic MDI/MDI-X

2-Way Isolation
- **I/O:** 3750 Vrms

EMS Protection
- **ESD (IEC 61000-4-2):** 4 kV contact for each terminal
- **EFT (IEC 61000-4-4):** ±2 kV for power

LED Indicators
- **PoE Power:** PoE on
- **L1:** System running
- **L2:** Ethernet link/act
- **L3:** Ethernet 10/100 M speed

Power Requirements
Reverse Polarity Protection: Yes
Powered from Terminal Block: Yes, 12 to 48 Vdc
Powered from PoE: Yes, IEEE 802.3af, Class1
Consumption: 4.3 W

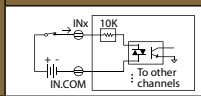
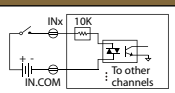
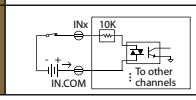
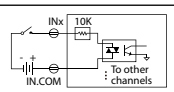
Mechanical
Dimensions: 72 W x 123 L x 35 mm D (2.83 x 4.84 x 1.37")
Installation: DIN-rail or wall mounting

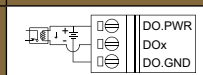
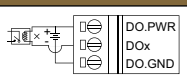
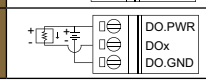
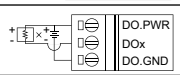
Environment
Operating Temperature: -25 to 75°C (-13 to 167°F)
Storage Temperature: -30 to 80°C (-22 to 176°F)
Humidity: 10 to 90% RH, non-condensing

Software Functions
Rule Configuration Website: Access Web server on OME-WISE-7000 controllers to edit and upload logic rules through web browser
36 IF-THEN-ELSE Logic Rules: 3 IF conditions with AND or OR operators, 3 THEN actions and 3 ELSE actions

48 Internal Registers: Hold temporary variables and read/write data via Modbus/TCP address
12 Timers: Delay/timing functions
12 Emails: Send Email messages to pre-set Email receivers
12 CGI Commands: Send pre-set CGI commands
12 Recipes: Set up THEN/ELSE action groups
8 P2P Remote Modules: Set up the connection information for the remote OME-WISE-7000 modules
MODBUS/TCP Protocol: Real time control and monitoring I/O channels and system status of controllers via SCADA software

WIRE CONNECTION

Digital Input	Readback as 1	Readback as 0
	10 to 50 Vdc	OPEN or <4 Vdc
Sink		
Source		

Digital Output	ON State Readback as 1	OFF State Readback as 0
Drive Relay		
Resistance Load		

IF Conditions	
DI Channel	NO, OFF, ON to OFF, OFF to ON, Change
Internal Register	=, >, <, >=, <= (value)
DI Counter	=, >, <, >=, <= (value) Change
DO Counter	
Timer	Timeout, Not Timeout
P2P	DI, AI, DI counter, DO counter, IR
Rule Status	Enable, Disable

OME-WISE IF-THEN-ELSE Rule Engine

THEN / ELSE Actions	
DO Channel	ON, OFF, Pulse Output
Internal Register	Change the value
DI Counter	Reset
DO Counter	
Timer	Start, Reset
Email	Send
CGI Commands	
Recipe	Execute
P2P	DO (On/Off), AO, IR
Rule Status	Enable, Disable

Terminal No.	Pin Assignment
E1	RJ-45
01	IN3
02	IN4
03	IN5
04	IN6
05	IN7
06	IN.COM2
07	N/A
08	(R)+Vs
09	(B)GND

Terminal No.	Pin Assignment
23	IN2
22	IN1
21	IN0
20	IN.COM1
19	DO7
18	DO6
17	DO5
16	DO4
15	DO3
14	DO2
13	DO1
12	DO0
11	DO.GND
10	DO.PWR

To Order *Visit omega.com/ome-wise-7000_series for Pricing and Details*

Model No.	Description
OME-WISE-7144	8-channel isolated sink type open collector output and 8-channel isolated digital input 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 @ 850 mA
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-WISE-7144 *8-channel isolated sink type open collector output and 8-channel isolated digital input PoE module, and* ***OCW-1*** *OMEGACARE℠ extends standard 1-year warranty to a total of 2 years.*

NEW

16-Channel Isolation Digital Input PoE Module

OME-WISE-7151

1 YEAR WARRANTY

- **Built-In Web Server for IF-THEN-ELSE Rule Setting**
- **Built-In IF-THEN-ELSE Rule Engine for Logic Operation**
- **No Programming Required**
- **Support IO, Counter, Timer, Email Operations**
- **MODBUS®/TCP Protocol for SCADA Software Seamless Integration**
- **IEEE 802.3af-Compliant Power Over Ethernet (PoE)**
- **10/100 Base-TX Ethernet**
- **2-Way Isolation/ESD Protection**
- **DI Type: 16 Wet Contact (Sink/Source)**

OME-WISE-7151 shown actual size.

OME-WISE-7000 (Web Inside, Smart Engine) is a product series that functions as control units for use in remote logic control and monitoring in various industrial applications. The OME-WISE-7000 Series offers a user-friendly and intuitive web site interface that allows users to implement IF-THEN-ELSE control logic on controllers just a few clicks away; no programming is required. With its powerful and easy-to-use features, it will minimize the learning curve, shorten time to market and dramatically reduce the labor and cost spent on system development.

OME-WISE-7151 follows IEEE 802.3af-compliant (classification, Class 1) Power over Ethernet (PoE) specification. It allows receiving power from PoE enabled network by Ethernet pairs (Category 5 Ethernet cable). This feature provides greater flexibility and higher efficiency therefore simplifying systems design, saving space, reducing cables and eliminating the requirement for dedicated electrical outlets. Meanwhile, in case under a non-PoE environment, OME-WISE-7151 will still be able to receive power from auxiliary power sources like AC adaptors or battery, etc.

This module OME-WISE-7151 supports MODBUS/TCP protocol to make seamless integration with SCADA software available. It features 16-channel isolated wet contact digital inputs. Each digital input channel supports counter input.

Specifications

Digital Input
- **Input Channels:** 16
- **Input Type:** Wet contact (sink, source)
- **On Voltage Level:** 10 to 50 Vdc
- **Off Voltage Level:** 4 Vdc maximum
- **Input Impedance:** 10 kΩ
- **Counters**
  - **Maximum Count:** 65535 (16 bits)
  - **Maximum Input Frequency:** 50 Hz
  - **Minimum Pulse Width:** 10 ms
- **Overvoltage Protection:** 70 Vdc

System
- **CPU:** 16-bit CPU
- **SRAM:** 512KB
- **Flash Memory:** 512KB
- **EEPROM:** 16KB
- **Watchdog:** Yes

Communication
- **PoE Ethernet Port:** 10/100 base-TX and automatic MDI/MDI-X

2-Way Isolation
- **I/O:** 3750 Vrms

EMS Protection
- **ESD (IEC 61000-4-2):** 4 kV contact for each terminal
- **EFT (IEC 61000-4-4):** ±2 kV for power

LED Indicators
- **PoE Power:** PoE on
- **L1:** System running
- **L2:** Ethernet link/act
- **L3:** Ethernet 10/100 M speed

Power Requirements
- **Reverse Polarity Protection:** Yes
- **Powered from Terminal Block:** Yes, 12 to 48 Vdc
- **Powered from PoE:** Yes, IEEE 802.3af, Class1
- **Consumption:** 3.9 W

NEW

Mechanical

Dimensions: 72 W x 123 L x 35 X mm 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

Software Functions

Rule Configuration Website: Access Web server on OME-WISE-7000 controllers to edit and upload logic rules through web browser.

36 IF-THEN-ELSE Logic Rules: 3 IF conditions with AND or OR operators, 3 THEN actions, and 3 ELSE actions

48 Internal Registers: Hold temporary variables and read/write data via MODBUS/TCP address

12 Timers: Delay/timing functions

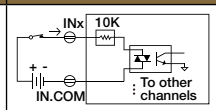
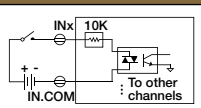
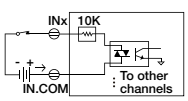
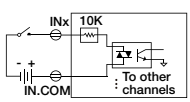
12 Emails: Send email messages to pre-set email receivers

12 CGI Commands: Send pre-set CGI commands

12 Recipes: Set up THEN/ELSE action groups

8 P2P Remote Modules: Set up the connection information for the remote OME-WISE-7000 modules

MODBUS/TCP Protocol: Real time control and monitoring I/O channels and system status of controllers via SCADA software

Digital Input	Readback as 1 10 to 50 Vdc	Readback as 0 OPEN or <4 Vdc
Sink		
Source		

IF Conditions	
DI Channel	NO, OFF, ON to OFF, OFF to ON, Change
Internal Register	=, >, <, >=, <= (value)
DI Counter	=, >, <, >=, <= (value) Change
Timer	Timeout, Not Timeout
P2P	DI, AI, DI counter, DO counter, IR
Rule Status	Enable, Disable

OME-WISE IF-THEN-ELSE Rule Engine

THEN / ELSE Actions	
Internal Register	Change the value
DI Counter	Reset
Timer	Start, Reset
Email	Send
CGI Commands	
Recipe	Execute
P2P	DO (On/Off), AO, IR
Rule Status	Enable, Disable

Terminal No.	Pin Assignment
E1	RJ-45
01	IN13
02	IN14
03	IN15
04	IN.COM2
05	N/A
06	N/A
07	N/A
08	(R)+Vs
09	(B)GND

Terminal No.	Pin Assignment
23	IN12
22	IN11
21	IN10
20	IN9
19	IN8
18	IN.COM1
17	IN7
16	IN6
15	IN5
14	IN4
13	IN3
12	IN2
11	IN1
10	IN0

To Order *Visit omega.com/ome-wise-7000_series for Pricing and Details*

Model No.	Description
OME-WISE-7151	16-channel isolation digital input 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 @ 850 mA
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-WISE-7151 *16-channel isolation digital input PoE module, and* ***OCW-1*** *OMEGACARE℠ extends standard 1-year warranty to a total of 2 years.*

NEW

8-Channel Isolated Sink Type Open Collector Output and 8-Channel Isolated Digital Input PoE Module

OME-WISE-7152

1 YEAR WARRANTY

- **Built-In Web Server for IF-THEN-ELSE Rule Setting**
- **Built-In IF-THEN-ELSE Rule Engine for Logic Operation**
- **No Programming Required**
- **Support IO, Counter, Timer, Email Operations**
- **MODBUS®/TCP Protocol for SCADA Software Seamless Integration**
- **IEEE 802.3AF-Compliant Power Over Ethernet (PoE)**
- **10/100 Base-TX Ethernet**
- **2-Way Isolation/ESD Protection**
- **DO Type: 8 Isolated Open Collectors (Source Type)**
- **DI Type: 8 Isolation Wet Contact (Sink/Source)**

OME-WISE-7000 (Web Inside, Smart Engine) is a product series that functions as control units for use in remote logic control and monitoring in various industrial applications. WISE offers a user-friendly and intuitive web site interface that allows users to implement IF-THEN-ELSE control logic on controllers just a few clicks away; no programming is required. With its powerful and easy-to-use features, it will minimize the learning curve, shorten time to market and dramatically reduce the labor and cost spent on system development.

OME-WISE-7152 follows IEEE 802.3af-compliant (classification, Class 1) Power over Ethernet (PoE) specification. It allows receiving power from PoE enabled network by Ethernet pairs (Category 5 Ethernet cable). This feature provides greater flexibility and higher efficiency therefore simplifying systems design, saving space, reducing cables and eliminating the requirement for dedicated electrical outlets. Meanwhile, in case under a non-PoE environment, OME-WISE-7152 will still be able to receive power from auxiliary power sources like AC adapters or battery, etc.

This module OME-WISE-7152 supports MODBUS/TCP protocol to make seamless integration with SCADA software available. It features 8-channel isolated open collector outputs and 8-channel isolated wet contact digital inputs. Each output channel supports 650 mA currnet driving @ 10 to 40 Vdc and each digital input channel supports counter input.

OME-WISE-7152 shown smaller than actual size.

Specifications

Digital Input
- **Input Channels:** 8
- **Input Type:** Wet Contact (Sink, Source)
- **On Voltage Level:** 10 to 50 Vdc
- **Off Voltage Level:** 4 Vdc Maximum
- **Input Impedance:** 10 kΩ

Counters:
- **Maximum Count:** 65535 (16 bits)
- **Maximum Input Frequency:** 50 Hz
- **Minimum Pulse Width:** 10 ms
- **Overvoltage Protection:** 70 Vdc

Digital Output
- **Output Channels:** 8
- **Output Type:** Open Collector (Source)
- **Maximum Load Current:** 650 mA/channel at 25°C
- **Output Voltage:** 10 to 40 Vdc
- **Overvoltage Protection:** 47 Vdc
- **Overload Protection:** —
- **Short-Circuit Protection:** Yes

System
- **CPU:** 16-bit CPU
- **SRAM:** 512KB
- **Flash Memory:** 512KB
- **Watchdog:** Yes

Communication
- **PoE Ethernet Port:** 10/100 Base-TX and automatic MDI/MDI-X

2-Way Isolation
- **I/O:** 3750 Vrms

EMS Protection
- **ESD (IEC 61000-4-2):** 4 kV contact for each terminal
- **EFT (IEC 61000-4-4):** ±2 kV for power

LED Indicators
- **PoE:** Power PoE On
- **L1:** System Running
- **L2:** Ethernet Link/Act
- **L3:** Ethernet 10/100 M Speed

Power Requirements
- **Reverse Polarity Protection:** Yes
- **Powered from Terminal Block:** Yes, 12 to 48 Vdc
- **Powered from PoE: Yes, IEEE 802.3af, Class1**
- **Consumption:** 4.3 W

NEW

Mechanical

Dimensions (W x L x D): 72 W x 123 L x 35 mm 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

Software Functions

Rule Configuration Website: Access web server on WISE controllers to edit and upload logic rules through web browser.

36 IF-THEN-ELSE Logic Rules: 3 IF conditions with AND or OR operators 3 THEN actions and 3 ELSE actions

48 Internal Registers: Hold temporary variables and read/write data via MODBUS/TCP address.

12 Timers: Delay/timing functions.

12 Emails: Send Email messages to pre-set email receivers

12 CGI Commands: Send pre-set CGI commands

12 Recipes: Set up THEN/ELSE action groups

8 P2P Remote Modules: Set up the connection information for the remote OME-WISE-7000 modules

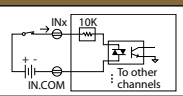
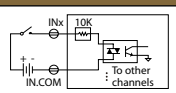
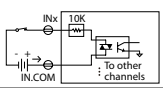
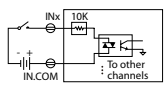
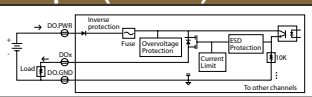
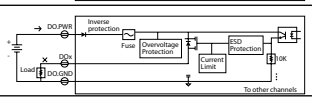
MODBUS/TCP Protocol: Real time control and monitoring I/O channels and system status of controllers via SCADA software

IF Conditions	
DI Channel	NO, OFF, ON to OFF, OFF to ON, Change
Internal Register	=, >, <, >=, <= (value)
DI Counter	=, >, <, >=, <= (value) Change
DO Counter	
Timer	Timeout, Not Timeout
P2P	DI, AI, DI counter, DO counter, IR
Rule Status	Enable, Disable

OME-WISE IF-THEN-ELSE Rule Engine

THEN / ELSE Actions	
DO Channel	ON, OFF, Pulse Output
Internal Register	Change the value
DI Counter	Reset
DO Counter	
Timer	Start, Reset
Email	Send
CGI Commands	
Recipe	Execute
P2P	DO (On/Off), AO, IR
Rule Status	Enable, Disable

WIRE CONNECTION

Digital Input	Readback as 1	Readback as 0
	10 to 50 Vdc	OPEN or <4 Vdc
Sink		
Source		
Digital Output (Source)		
ON State Readback as 1		
OFF State Readback as 0		

Terminal No.	Pin Assignment
E1	RJ-45
01	IN3
02	IN4
03	IN5
04	IN6
05	IN7
06	IN.COM2
07	N/A
08	(R)+Vs
09	(B)GND

Terminal No.	Pin Assignment
23	IN2
22	IN1
21	IN0
20	IN.COM1
19	DO7
18	DO6
17	DO5
16	DO4
15	DO3
14	DO2
13	DO1
12	DO0
11	DO.GND
10	DO.PWR

To Order *Visit omega.com/ome-wise-7000_series for Pricing and Details*

Model No.	Description
OME-WISE-7152	8-channel isolated source type open collector output and 8-channel isolated digital input 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 @ 850 mA
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-WISE-7152 *8-channel isolated source type open collector output and 8-channel isolated digital input PoE module, and* ***OCW-1*** *OMEGACARE℠ extends standard 1-year warranty to a total of 2 years.*

6-Channel Power Relay Output and 6-Channel Isolation Digital Input PoE Module

OME-WISE-7160

- **Built-In Web Server for IF-THEN-ELSE Rule Setting**
- **Built-In IF-THEN-ELSE Rule Engine for Logic Operation**
- **No Programming Required**
- **Support IO, Counter, Timer, Email Operations**
- **MODBUS®/TCP Protocol for SCADA Software Seamless Integration**
- **IEEE 802.3af-Compliant Power Over Ethernet (PoE)**
- **10/100 Base-TX Ethernet**
- **2-Way Isolation/ESD Protection**
- **DO Type: 6 Power Relay (Form A)**
- **DI Type: 6 Wet Contact (Sink/Source)**

OME-WISE-7000 (Web Inside, Smart Engine) is a product series that functions as control units for use in remote logic control and monitoring in various industrial applications. OME-WISE-7000 Series offers a user-friendly and intuitive web site interface that allows users to implement IF-THEN-ELSE control logic on controllers just a few clicks away; no programming is required. With its powerful and easy-to-use features, it will minimize the learning curve, shorten time to market and dramatically reduce the labor and cost spent on system development.

OME-WISE-7160 follows IEEE 802.3af-compliant (classification, Class 1) Power over Ethernet (PoE) specification. It allows receiving power from PoE enabled network by Ethernet pairs (Category 5 Ethernet cable). This feature provides greater flexibility and higher efficiency therefore simplifying systems design, saving space, reducing cables and eliminating the requirement for dedicated electrical outlets. Meanwhile, in case under a non-PoE environment, OME-WISE-7160 will still be able to receive power from auxiliary power sources like AC adapters or battery, etc.

This module OME-WISE-7160 supports MODBUS®/TCP protocol to make seamless integration with SCADA software available. It features 6 power relay outputs and 6 isolated wet contact digital inputs. Each power relay supports contact rating as 5 A @ 250 Vac or 5 A @ 30 Vdc and each channel supports the counter function.

Specifications

Digital Input
- **Input Channels:** 6
- **Input Type:** Wet contact (sink, source)
- **On Voltage Level:** 10 to 50 Vdc
- **Off Voltage Level:** 4 Vdc maximum
- **Input Impedance:** 10 kΩ
- **Counters**
  - **Maximum Count:** 65535 (16 bits)
  - **Maximum Input Frequency:** 50 Hz
  - **Minimum Pulse Width:** 10 ms
- **Overvoltage Protection:** 70 Vdc

OME-WISE-7160 shown smaller than actual size.

Power Relay
- **Output Channels:** 6
- **Output 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)
- **VDE:** 5A 250 Vac 30,000 ops (10 ops/minute) at 75°C; 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)

System
- **CPU:** 16-bit CPU
- **SRAM:** 512KB
- **Flash Memory:** 512KB
- **EEPROM:** 16KB
- **Watchdog:** Yes

Communication
- **PoE Ethernet Port:** 10/100 Base-TX and automatic MDI/MDI-X

2-Way Isolation
- **I/O:** 3000 Vrms

EMS Protection
- **ESD (IEC 61000-4-2):** 4 kV contact for each terminal
- **EFT (IEC 61000-4-4):** ±2 kV for power

LED Indicators
- **PoE Power:** PoE on
- **L1:** System running
- **L2:** Ethernet link/act
- **L3:** Ethernet 10/100 M speed

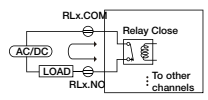
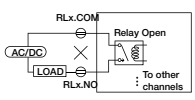
Power Requirements
Reverse Polarity Protection: Yes
Powered from Terminal Block: Yes, 12 to 48 Vdc
Powered from PoE: Yes, IEEE 802.3af, Class1
Consumption: 4.8 W

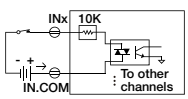
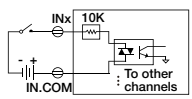
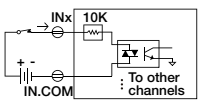
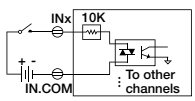
Mechanical
Dimensions: 72 W x 123 L x 35 mm D (2.83 x 4.84 x 1.37")
Installation: DIN-rail or wall mounting

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

Software Functions
Rule Configuration Website: Access web server on OME-WISE-7000 controllers to edit and upload logic rules through web browser

36 IF-THEN-ELSE Logic Rules: 3 IF conditions with AND or OR operators; 3 THEN actions and 3 ELSE actions
48 Internal Registers: Hold temporary variables and read/write data via MODBUS/TCP address
12 Timers: Delay/timing functions
12 Emails: Send email messages to pre-set email receivers
12 CGI Commands: Send pre-set CGI commands
12 Recipes: Set up THEN/ELSE action groups
8 P2P Remote Modules: Set up the connection information for the remote OME-WISE-7000 modules
MODBUS/TCP Protocol: Real time control and monitoring I/O channels and system status of controllers via SCADA software

Power Relay	On State Readback as 1	Off State Readback as 0
Relay Output		

Digital Input	Readback as 1 10 to 50 Vdc	Readback as 0 OPEN or <4 Vdc
Sink		
Source		

IF Conditions	
DI Channel	NO, OFF, ON to OFF, OFF to ON, Change
Internal Register	=, >, <, >=, <= (value)
DI Counter	=, >, <, >=, <= (value) Change
DO Counter	
Timer	Timeout, Not Timeout
P2P	DI, AI, DI counter, DO counter, IR
Rule Status	Enable, Disable

OME-WISE IF-THEN-ELSE Rule Engine

THEN / ELSE Actions	
DO Channel	ON, OFF, Pulse Output
Internal Register	Change the value
DI Counter	Reset
DO Counter	
Timer	Start, Reset
Email	Send
CGI Commands	
Recipe	Execute
P2P	DO (On/Off), AO, IR
Rule Status	Enable, Disable

Terminal No.	Pin Assignment
E1	RJ-45
01	IN5
02	IN4
03	IN3
04	IN2
05	IN1
06	IN0
07	IN.COM
08	(R)+Vs
09	(B)GND

Terminal No.	Pin Assignment
23	RL5 COM
22	RL5 NO
21	RL4 COM
20	RL4 NO
19	RL3 COM
18	RL3 NO
17	RL2 COM
16	RL2 NO
15	RL1 COM
14	RL1 NO
13	RL0 COM
12	RL0 NO
11	N/A
10	N/A

To Order *Visit omega.com/ome-wise-7000_series for Pricing and Details*

Model No.	Description
OME-WISE-7160	6-channel power relay output and 6-channel isolation digital input 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 @ 850 mA
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-WISE-7160 *6-channel power relay output and 6-channel isolated digital input PoE module, and* ***OCW-1*** *OMEGACARE℠ extends standard 1-year warranty to a total of 2 years.*

NEW

8-Channel Power Relay Output PoE Module

OME-WISE-7167

1 YEAR WARRANTY

- **Built-in Web Server for IF-THEN-ELSE Rule Setting**
- **Built-In IF-THEN-ELSE Rule Engine for Logic Operation**
- **Support IO, Counter, Timer, Email Operations**
- **No Programming Required**
- **MODBUS/TCP Protocol for SCADA Software Seamless Integration**
- **IEEE 802.3af-Compliant Power Over Ethernet (PoE)**
- **10/100 Base-TX Ethernet**
- **2-Way Isolation/ESD Protection**
- **DO Type: 8 Power Relay (Form A)**

OME-WISE-7000 (Web Inside, Smart Engine) is a product series that functions as control units for use in remote logic control and monitoring in various industrial applications.

OME-WISE-7000 offers a user-friendly and intuitive web site interface that allows users to implement IF-THEN-ELSE control logic on controllers just a few clicks away; no programming is required. With its powerful and easy-to-use features, it will minimize the learning curve, shorten time to market and dramatically reduce the effort and cost spent on system development.

OME-WISE-7167 follows IEEE 802.3af-compliant (classification, Class 1) Power over Ethernet (PoE) specification. It allows receiving power from PoE enabled network by Ethernet pairs (Category 5 Ethernet cable). This feature provides greater flexibility and higher efficiency therefore simplifying systems design, saving space, reducing cables and eliminating the requirement for dedicated electrical outlets. Meanwhile, in case under a non-PoE environment, OME-WISE-7167 will still be able to receive power from auxiliary power sources like AC adapters or battery, etc.

This module OME-WISE-7167 supports MODBUS/TCP protocol to make seamless integration with SCADA software available. It features 8-channel power relay outputs. Each power relay supports contact rating as 5 A @ 250 Vac or 5 A @ 30 Vdc.

OME-WISE-7167 shown smaller than actual size.

Specifications

I/O

Power Relay

Output Channels: 8

Output 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)

VDE: 5A 250 Vac 30,000 ops (10 ops/minute) at 75°C (167°F); 5A 30 Vdc 70,000 ops (10 ops/minute) at 75°C (167°F)

UL: 5A 250 Vac/30 Vdc 6000 ops. 3A 250 Vac/30 Vdc 100,000 ops.

Mechanical Life: 20,000,000 ops. at no load (300 ops./minute)

System

CPU: 16-bit CPU

SRAM: 512 K

Flash Memory: 512 K

EEPROM: 16 K

Watchdog: Yes

Communication

PoE Ethernet Port: 10/100 Base-TX and automatic MDI/MDI-X

2-Way Isolation

I/O: 3000 Vrms

EMS Protection

ESD (IEC 61000-4-2): 4 kV contact for each terminal

EFT (IEC 61000-4-4): ±2 kV for power

LED Indicators

PoE Power: PoE on

L1: System running

L2: Ethernet link/act

L3: Ethernet 10/100M speed

Power Requirements

Reverse Polarity Protection: Yes

Powered from Terminal Block: Yes, 12 to 48 Vdc

Powered from PoE: Yes, IEEE 802.3af, Class1

Consumption: 5.3 W

Mechanical

Dimensions: 72 W x 123 H x 35 mm D (2.83 x 4.84 x 1.37")

Installation: DIN-rail or wall mounting

NEW

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

Software Functions

Rule Configuration Website: Access Web server on WISE controllers to edit and upload logic rules through web browser
36 IF-THEN-ELSE Logic Rules: 3 IF conditions with AND or OR operators, 3 THEN actions and 3 ELSE actions
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Internal Register	=, >, <, >=, <= (value)
DO Counter	=, >, <, >=, <= (value) Change
Timer	Timeout, Not Timeout
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Recipe	Execute
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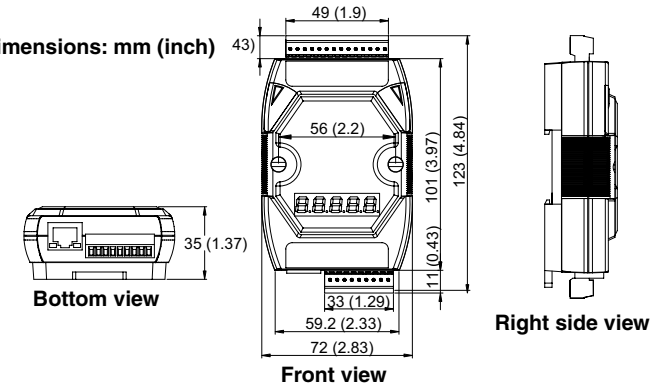
Dimensions: mm (inch)



Wire Connections

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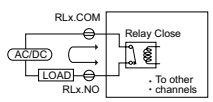
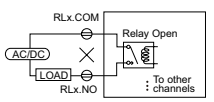
Relay Output		

Pin Assignments

Terminal No.	Pin Assignment
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Terminal No.	Pin Assignment
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