



WISE-7519ZM

WISE I/O Module with 10-channels universal AI, 3-channels DO and 2-port Ethernet Switch

Features

- No more programming, Web pages provided for system and logic rule setting.
- IF-THEN-ELSE logic rules execution ability.
- Built-in I/O
AI: 10 Channels; DO: 3 Channels
- Support I/O Monitoring/Control, Counter, Schedule, Timer, Email sending and CGI Command sending operations.
- Modbus TCP Protocol for SCADA System Integration.
- IEEE 802.3af-compliant Power over Ethernet (PoE).
- 2-port Ethernet Switch for Daisy-Chain Topology.
- MQTT Protocol for IT & IoT (Internet of Things) System Integration.
- Support connection with IoTstar Cloud Management Software



Introduction

WISE (Web Inside, Smart Engine) is a product series developed by ICP DAS that functions as control units for use in remote logic control and monitoring in various industrial applications. By integrating with IF-THEN-ELSE rule engine, WISE-7519ZM provides more powerful functions such as I/O Monitoring/Control, Counter, Timer, Schedule, E-mail sending, CGI Command sending and Modbus TCP and MQTT protocol, and allows users to implement control logic on controllers just a few clicks away; no programming is required. WISE-7519ZM also can connect with ICP DAS IoTstar cloud management software for the services such as Remote Access and Sensor Data Collection.

WISE-7519ZM is a module with 10-channel analog inputs, and 3-channel digital outputs. It follows IEEE 802.3af-compliant Power over Ethernet (PoE) specification, and has a built-in two-port Ethernet switch to implement daisy-chain topology.

I/O Specifications

Thermocouple Input	
Channels	10 (Differential)
Sensor Type	+/-15 mV, +/-50 mV, +/-100 mV, +/-150 mV, +/-500 mV, +/-1 V, +/-2.5 V, +/-5 V, +/-10 V,
	+/-20 mA, 0 to 20 mA, 4 to 20 mA (Jumper Selectable)
	Thermocouple (J, K, T, E, R, S, B, N, C, L, M, and LDIN43710)
Resolution	16-bit
Sampling Rate	10 Samples/Second (Total)
Accuracy	+/-0.1% of FSR or better
Over Voltage Protection	240 Vrms
Input Impedance	>300 kΩ
Temperature Output Consistency	Yes
Stable Temperature Output in the Field	Yes
Open Wire Detection	Yes
Virtual Channel to Channel Isolation	+/-400 VDC
Digital Output	
Channels	3
Type	Isolated Open Collector
Sink/Source (NPN/PNP)	Sink
Max. Load Current	650 mA/Channel
Load Voltage	5 VDC to 50 VDC
Overvoltage Protection	60 VDC
Overload Protection	1.4 A
Short-circuit Protection	Yes

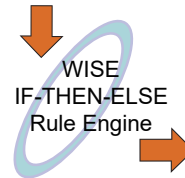
System Specifications

Communication	
Ethernet Port	2 x RJ-45, 10/100 Base-TX, Swtich Ports
PoE	Yes
Protocol	Modbus TCP, MQTT
LED Indicators	
for System Running	Yes
for Ethernet Link/Act	Yes
for I/O Channel Status	Yes
for PoE Power	Yes
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)	±2 kV for Power Line
Surge (IEC 61000-4-5)	±2 kV for Power Line
Power	
Reverse Polarity Protection	Yes
Powered from Terminal Block	12 to 48 VDC
Powered from PoE	Yes, IEEE 802.3af, Class1
Consumption	3.6 W (Max.)
Mechanical	
Dimensions (L x W x H)	114mm x 97mm x 38mm
Installation	Wall mounting
Environment	
Operating Temperature	-25 °C to +75 °C
Storage Temperature	-30 °C to +80 °C
Humidity	10 to 90% RH, non-condensing

Software Specifications

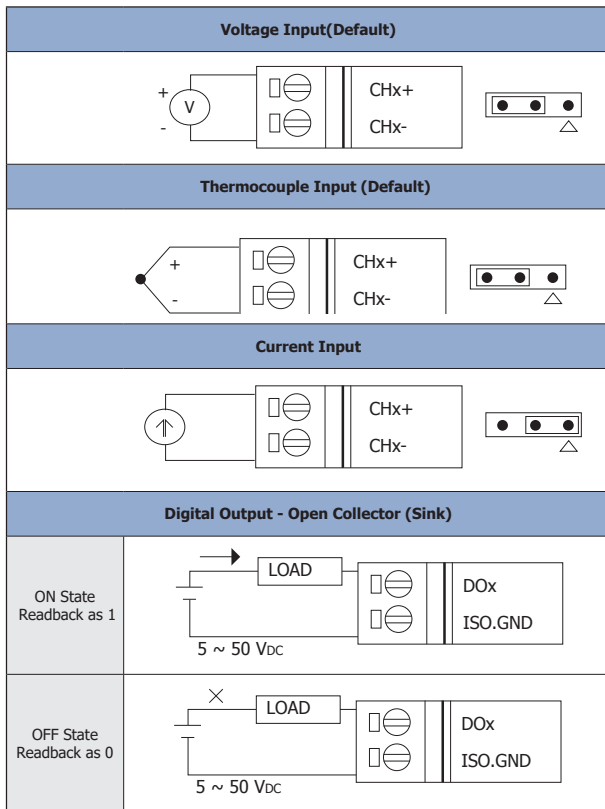
Functions	
Rule Configuration Website	Access Web server on WISE controllers to edit and upload logic rules through web browser.
72 IF-THEN-ELSE Logic Rules	3 IF conditions with AND or OR operators 3 THEN actions and 3 ELSE actions
48 Internal Registers	Hold temporary variables and read/write data
24 Timers	Delay / Timing functions.
24 Schedules	Setup prescheduled routine tasks.
24 Emails	Send Email messages to pre-set Email receivers.
24 CGI Commands	Send pre-set CGI commands.
24 Recipes	Set up THEN/ELSE action groups.
8 P2P remote modules	Set up the connection information for the remote WISE modules.
Integration with SCADA/IT/IoT Systems	Support Modbus TCP and MQTT protocols for the integration with SCADA/IT/IoT systems. Support connection with ICP DAS IoTstar Cloud Management Software.

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

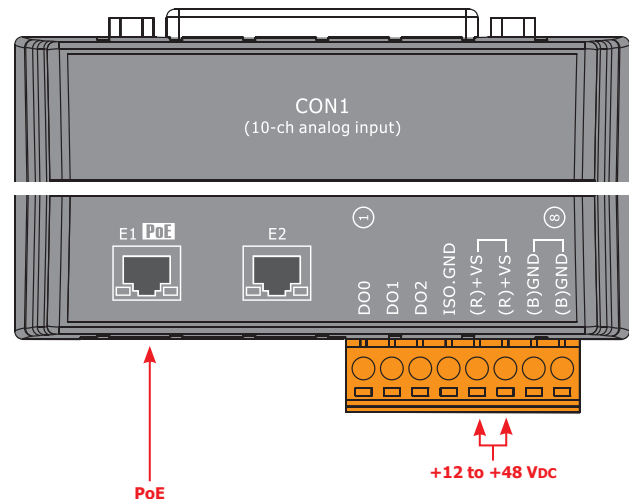


THEN / ELSE Actions	
DO Channel	ON, OFF, Pulse Output
Internal Register	Change the value
DO Counter	Reset
Timer	Start, Reset
Schedule	Enable, Disable
Email	
MQTT message	Send
CGI Command	
Recipe	Execute
P2P	DO(On/Off), AO, IR
Rule Status	Enable, Disable

Wire Connections



Pin Assignments



Ordering Information

WISE-7519ZM/S CR	WISE I/O Module with 10-channels universal AI, 3-channels DO, 2-port Ethernet Switch and DB-1820 Daughter Board (RoHS)
WISE-7519ZM/S2 CR	WISE I/O Module with 10-channels universal AI, 3-channels DO, 2-port Ethernet Switch and DN-1822 Daughter Board and a 1.8 m Cable (RoHS)

Accessories

GPSU06U-6	24V/0.25A, 6 W Power Supply
MDR-20-24	24V/1A, 24 W Power Supply with DIN-Rail Mounting
NS-205 CR	Unmanaged 5-Port Industrial Ethernet Switch (RoHS)
NS-205PSE CR	Unmanaged 5-Port Industrial PoE Ethernet Switch (RoHS)