



WISE (Web Inside, Smart Engine)



Analog Input & Digital Output

Features

- Built-in Web Server for IF-THEN-ELSE rule setting
- Built-in IF-THEN-ELSE rule engine for logic operation
- No more programming. Just click and get done!
- 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 Thermistor Input
- Individual Channel Configuration
- 4-channel Digital Outputs
- 2-way Isolation/ESD Protection

CE FCC RoHS PoE

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. 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 effort and cost spent on system development.

WISE-7105 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, WISE-7105 will still be able to receive power from auxiliary power sources like AC adapters or battery, etc.

This multi-function module WISE-7105 supports Modbus/TCP protocol to make seamless integration with SCADA software available. It features 16-bit, 8-channel Thermistor inputs and 4-channel digital outputs. Each analog channel is allowed to configure an individual range.

Applications

Building Automation, Factory Automation, Machine Automation, Remote Maintenance, Remote diagnosis and Testing Equipment, etc.

I/O Specifications

Analog Input	
Input Channels	8 (Differential)
Input Type	Precon ST-A3, Fenwell U, YSI L100, YSI L300, YSI L1000, YSI B2252, YSI B3000, YSI B5000, YSI B6000, YSI B10000, YSI H10000, YSI H30000
Resolution	16-bit
Sampling Rate	8 Sample/Sec. (Total)
Accuracy	+/-0.1% or better
Zero Drift	+/-10 µV/°C
Span Drift	+/-25 ppm/°C
Over voltage Protection	110 V _{DC} /V _{AC}
Common Mode Rejection	86 dB min.
Normal Mode Rejection	100 dB
Open Wire Detection	Yes
Individual Channel Configuration	Yes
ESD Protection	+/-4 kV (Contact for each channel) +/-8KV air for random point
EFT Protection	+/-4 kV for Power
Digital Output	
Output Channels	4 (Sink)
Output Type	Isolated Open Collector
Max. Load Current	700 mA/Channel
Load Voltage	5 V _{DC} ~ 50 V _{DC}

System Specifications

System	
CPU	16-bit CPU
SRAM	512 KB
Flash Memory	512 KB
EEPROM	16 KB
Dual Watchdog	Yes
Communication	
PoE Ethernet Port	10/100 Base-TX (With Link, Activity LED Indicator) and automatic MDI/MDI-X
2-Way Isolation	
Ethernet	1500 V _{DC}
AI and DO	2500 V _{DC}
LED Indicators	
PoE	PoE On
L1	Run
L2	Link/Act
L3	10/100M
Power Requirements	
IEEE 802.3af	Class 1
Required Supply Voltage	Powered by Power over Ethernet (PoE) or auxiliary power +12 V _{DC} ~ +48 V _{DC} (non-regulated)
LED Indicator	Yes
Power Consumption	0.12 A @ 24 V _{DC} Max.
Mechanical	
Dimensions (W x H x D)	72 mm x 123 mm x 35 mm
Installation	DIN-Rail or Wall mounting
Environment	
Operating Temperature	-25 °C ~ +75 °C
Storage Temperature	-30 °C ~ +80 °C
Humidity	5 ~ 90% RH, non-condensing

