# **ADAM-6224**

## 4-ch Isolated Analog Output Modbus TCP Module



NEW



### **Main Features**

- 4-ch AO, 4-ch DI, 2-port Ethernet
- Daisy chain connection with auto-bypass protection
- · Remote monitoring and control with mobile devices
- Group configuration capability for multiple module setup
- Flexible user-defined Modbus address
- Intelligent control ability by Peer-to-Peer and GCL function
- Multiple protocol support: Modbus TCP, TCP/IP, UDP, HTTP, DHCP
- Web language support: XML, HTML 5, Java Script

# Introduction

In order to fulfill ideal remote DAQ devices in IoT world, Advantech releases ADAM-6200 series, a new selection of Ethernet I/O family comprised of analog I/O, digital I/O and relay modules. ADAM-6200 series module possesses plenty of advanced features whatever the evolution of hardware design and what's worth expecting for user is a variety of useful software functions to make it effective in the application field. With new design and strong capabilities, ADAM-6200 can be a well-integrated I/O solution in Ethernet control system.

### **Features**

### **Daisy Chain Networking and Auto-Bypass Protection**

Daisy chain connectivity offers flexible cabling and space saving capabilities. With Ethernet auto-bypss function supported, it prevents accidental power failure if one of the module's unexpectedly shuts down.



### **Group Configuration Capability for Multiple Module Setup**

To aid configuration and save time, engineers can configure and upgrade the firmware of multiple ADAM-6200s simultaneously.



### **Remote Monitoring and Control with Smart Phone**

With support for HTML5, the ADAM-6200 can be monitored and controlled from any browser on mobile devices whilst in the field and when the engineer is connected to their network.

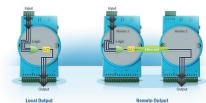
### Peer-to-Peer

Modules will actively update the input channel status to specific output channels. Without dealing with the trouble of long distance wiring, users can define the mapping between a pair of modules.

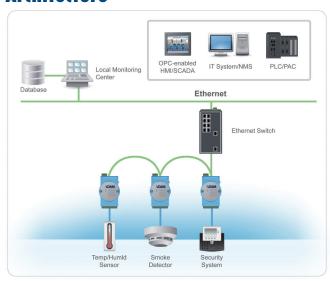


### **Graphic Condition Logic**

Users can define the control logic rules through graphical configuration Utility, and download defined logic rules to specific ADAM module. Then, it will execute the logic rules automatically just like a standalone controller.



### **Architecture**



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Remote I/O ADAM-6224

# **Specifications**

### **Analog Output**

 $\begin{array}{lll} \bullet & \textbf{Channels} & 4 \\ \bullet & \textbf{Output Impedance} & 2.1 \ \Omega \\ \bullet & \textbf{Output Settling Time} & 20 \ \mu s \\ \bullet & \textbf{Driving Load} & \textbf{Voltage: } 2k\Omega \\ \end{array}$ 

Current:  $500 \Omega$ 

■ **Programmable** 0.125 ~ 128 mA/sec **Output Slope** 0.0625 ~ 64 V/sec

Output Type
 V, mA

• **Output Range**  $0 \sim 5 \text{ V}, 0 \sim 10 \text{ V}, \pm 5 \text{ V}, \pm 10 \text{ V}$ 

 $0 \sim 20 \text{ mA}, 4 \sim 20 \text{ mA}$ 

■ **Accuracy** ± 0.3% of FSR (Voltage) at 25°C

 $\pm~0.5\%$  of FSR (Current) at 25°C

 $\begin{array}{lll} \bullet & \textbf{Resolution} & 12\text{-bit} \\ \bullet & \textbf{Current Load Resistor} & 0 \sim 500~\Omega \\ \bullet & \textbf{Drift} & \pm 50~\text{ppm/°C} \\ \end{array}$ 

### **Digital Input**

Channels 4 (Dry Contact only)
 Dry Contact Logic 0: Open
 Logic 1: Closed to DGND

Support DI Filter

Support Inverted DI Status

Support Trigger to Startup or Safety Value

#### General

Ethernet 2-port 10/100 Base-TX (for Daisy Chain)
 Protocol Modbus/TCP, TCP/IP, UDP, HTTP, DHCP
 Connector Plug-in 5P/15P Screw Terminal Blocks
 Power Input 10 - 30 V<sub>DC</sub> (24 V<sub>DC</sub> Standard)
 Watchdog Timer System (1.6 Seconds)

System (1.6 Seconds)
Communication (Programmable)

Protection
 Built-in TVS/ESD Protection

Power Reversal Protection Over Voltage Protection:  $\pm$  35  $V_{DC}$  Isolation Protection: 2500  $V_{DC}$ 

Power Consumption 6W @ 24 V<sub>DC</sub>
 Dimensions (W x H x D) 70 x 122 x 27 mm

EnclosurePC

Mounting DIN 35 Rail, Stack, Wall

#### Software

 .NET Class Library (SDK) Windows and Windows CE Class Library, VB and VC# Sample Code for I/O Reading or Configuration and

Communication

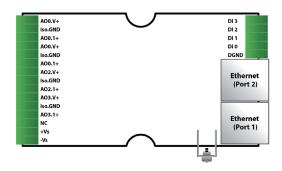
- Adam/Apax .NET Utility Network Setting, I/O Configuration, Data Stream, P2P,

GCL Configuration

#### **Environment**

Operating Temperature -10 ~ 70°C (14 ~ 158°F)
 Storage Temperature -20 ~ 80°C (-4 ~ 176°F)
 Operating Humidity 20 ~ 95% RH (non-condensing)
 Storage Humidity 0 ~ 95% RH (non-condensing)

# **Pin Assignment**



# **Ordering Information**

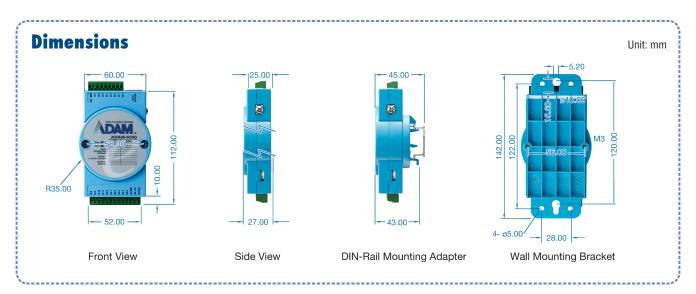
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### Accessories

PWR-242 DIN-rail Power Supply (2.1A Output Current)
 PWR-243 Panel Mount Power Supply (3A Output Current)
 PWR-244 Panel Mount Power Supply (4.2A Output Current)

#### Software

PCLS-ADAMVIEW32 ADAMView Data Acquisition Software
 PCLS-OPC/MTP30 OPC Server for Modbus/TCP protocol



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