ADAM-6217

8-ch Isolated Analog Input Modbus TCP Module

Main Features

NEW

- 8-ch differential AI, 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

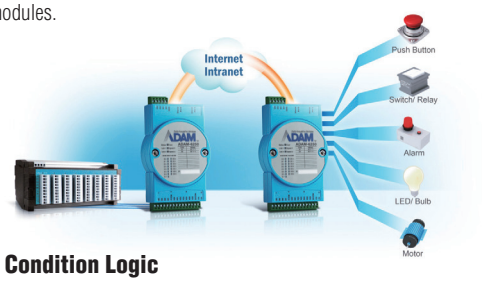
To aid configuration and save time, engineers can configure and upgrade the firmware of multiple ADAM-6200s simultaneously.

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.

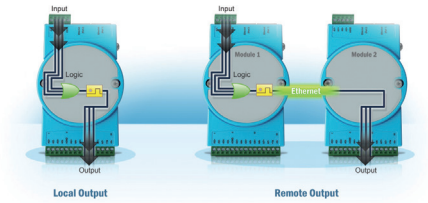
Peer-to-Peer

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.

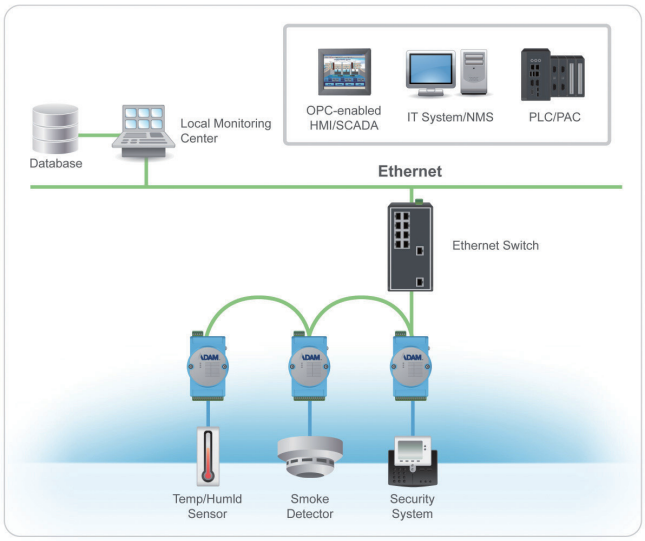


Graphic Condition Logic

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



Last updated : 10-Jun-2014

Specifications

Analog Input

- **Channels** 8 (differential)
- **Input Impedance** > 10 MΩ (voltage)
  120 Ω (current)
- **Input Type** mV, V, mA
- **Input Range** ±150 mV, ±500 mV, ±1 V, ±5 V, ±10 V,
  0~20 mA, 4~20 mA, ±20 mA
- **Span Drift** ± 30 ppm/°C
- **Zero Drift** ± 6 μV/°C
- **Resolution** 16-bit
- **Accuracy** ± 0.1% of FSR (Voltage) at 25°C
  ± 0.2% of FSR (Current) at 25°C
- **Sampling Rate** 10 sample/second (total)
- **CMR @ 50/60 Hz** 92 dB
- **NMR @ 50/60 Hz** 60 dB
- **Common Mode** 200 V_{DC}

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_{DC} (24 V_{DC} Standard)
- **Watchdog Timer** System (1.6 Seconds)
- **Protection** Built-in TVS/ESD Protection
  Power Reversal Protection
  Over Voltage Protection: +/- 35 V_{DC}
  Isolation Protection: 2500 V_{DC}
- **Power Consumption** 3.5W @ 24 V_{DC}
- **Dimensions (W x H x D)** 70 x 122 x 27 mm
- **Enclosure** PC
- **Mounting** DIN 35 Rail, Stack, Wall

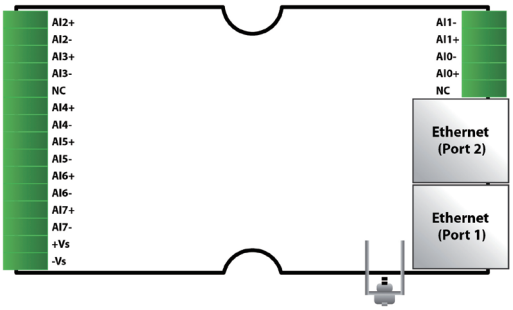
Software

- **.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

- **ADAM-6217** 8-ch Isolated Analog Input Modbus TCP Module

Accessories

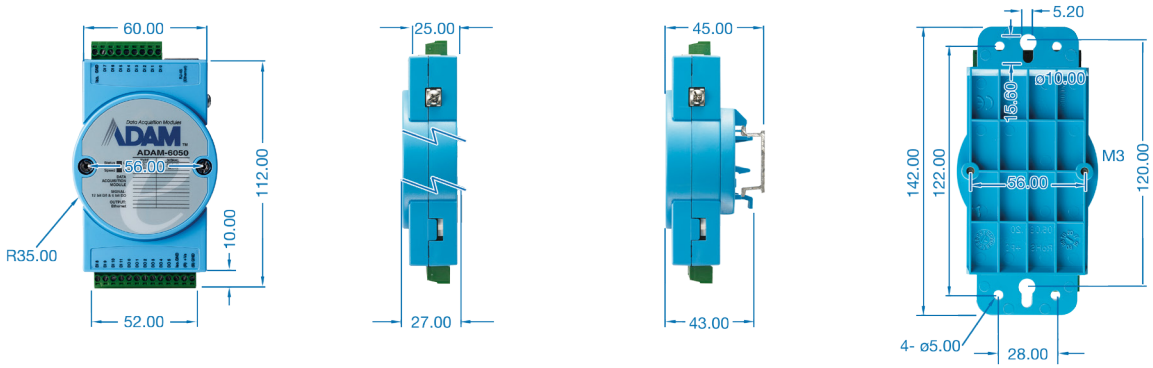
- **PWR-242** DIN-rail Power Supply (2.1A Output Current)
- **PWR-243** Panel Mount Power Supply (3A Output Current)
- **PWR-244** Panel Mount Power Supply (4.2A Output Current)

Software

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

Dimensions

Unit: mm



Front View Side View DIN-Rail Mounting Adapter Wall Mounting Bracket