ADAM-6060

6-ch Digital Input and 6-ch Relay Modbus TCP Module

Main Features

NEW

- 6-ch DI, 6-ch RL, Ethernet-based smart I/O
- 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
- Active I/O message by data stream or event trigger function
- Multiple protocol support: Modbus TCP, TCP/IP, UDP, HTTP, DHCP
- Web language support: XML, HTML 5, Java Script

Introduction

ADAM-6000 accomplishes the integration of automation and enterprise systems easily through internet technology, so that users can avoid changing the entire architecture of the control system and even remotely monitor the device status more flexibly. ADAM-6000 modules are empowered by peer-to-peer (P2P) and Graphic Condition Logic (GCL), and can perform as standalone products for measurement, control and automation. Instead of having additional controllers or programming, system configurations can be done in an extremely short time with the easy-to-use and intuitive graphic utility.

Features

Group Configuration Capability for Multiple Module Setup

To aid configuration and save time, engineers can configure and upgrade the firmware of multiple ADAM-6000s simultaneously.

Remote Monitoring and Control with Smart Phone

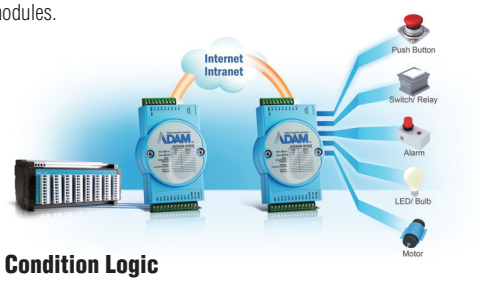
With support for HTML5, the ADAM-6000 can be monitored and controlled from any browser on mobile devices whilst in the field and when the engineer is connected to their network.

Advanced Security and High Reliability

ADAM-6000 Ethernet I/O modules have fast response time, and advanced security and reliability. When communication is broken, the digital output module can generate pre-defined values to ensure safety.

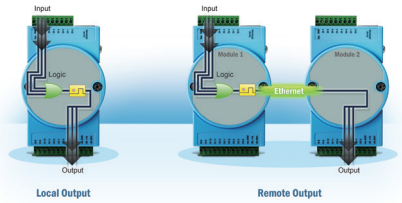
Peer-to-Peer

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.

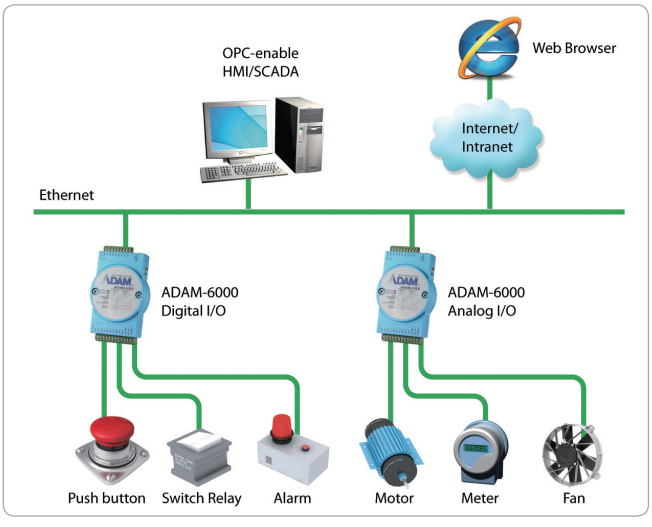


Graphic Condition Logic

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



Specifications

Digital Input

- **Channels** 6
- **Dry Contact** Logic level 0: close to GND
  Logic level 1: open
- **Wet Contact** Logic level 0: 3 V_{DC}
  Logic level 1: 10 ~ 30 V_{DC}
- **Supports 3 kHz Counter Input (32-bit + 1-bit overflow)**
- **Keep/Discard Counter Value when Power-off**
- **Supports 3 kHz Frequency Input**
- **Supports Inverted DI Status**

Relay Output (Form A)

- **Channels** 6
- **Contact Rating (Resistive)** 120 V_{AC} @ 0.5 A, 30 V_{DC} @ 1 A
- **Breakdown Voltage** 500 V_{AC} (50/60 Hz)
- **Relay On Time** 7 ms
- **Relay Off Time** 3 ms
- **Total Switching Time** 10 ms
- **Insulation Resistance** 1 GΩ min. at 500 V_{DC}
- **Maximum Switching Rate (at rated load)** 20 operations/minute
- **Supports Pulse Output**

General

- **LAN** 10/100Base-T(X)
- **Power Consumption** 3 W (max) @ 24 V_{DC}
- **Connectors** RJ-45 (Ethernet),
  Plug-in screw terminal block (I/O and power)
- **Watchdog** System (1.6 second) and
  Communication (programmable)
- **Power Input** 10 ~ 30 V_{DC}
- **Dimensions (W x H x D)** 70 x 122 x 27 mm
- **Enclosure** PC
- **Mounting** DIN 35 rail, stack, wall
- **Supports Peer-to-Peer, GCL**
- **Supports User Defined Modbus Address**
- **Supports Modbus/TCP, TCP/IP, UDP, DHCP and HTTP Protocols**

Protection

- **Power Reversal Protection**
- **Isolation Protection** 2,000 V_{DC}

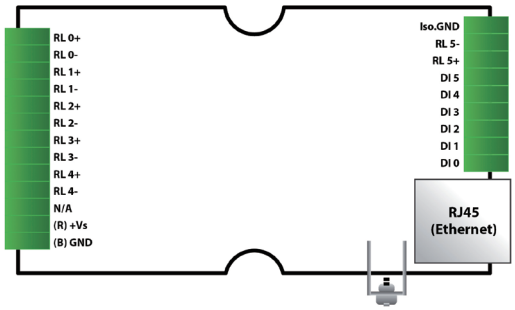
Environment

- **Operating Temperature** -20 ~ 70°C (-4 ~ 158°F)
- **Storage Temperature** -30 ~ 80°C (-22 ~ 176°F)
- **Operating Humidity** 20 ~ 95% RH (non-condensing)
- **Storage Humidity** 0 ~ 95% RH (non-condensing)

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

Pin Assignment



Ordering Information

- **ADAM-6060** 6-ch DI and 6-ch Relay Modbus TCP Module

Accessories

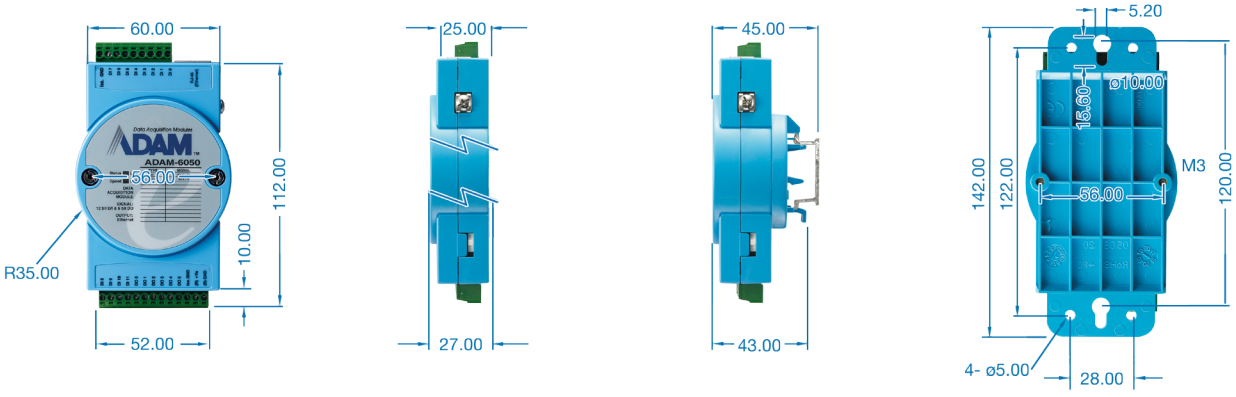
- **PWR-242** DIN-rail Power Supply (2.1A Output Current)
- **PWR-243** Panel Mount Power Supply (3A Output Current)
- **PWR-244** Panel Mount Power Supply (4.2A Output Current)

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