

## AD2006 Telemetry Module

## SPECIFICATION

### DIGITAL INPUTS - 16

Two input voltage ranges are available :

10-35VAC/DC	AD2006x-Lx-xx
70-130VAC/DC	AD2006x-Hx-xx

### PULSE COUNTERS

The first two digital inputs can be configured as pulse counters to 5KHz.

All digital inputs can count to 5Hz.

### DIGITAL OUTPUTS - 4

The digital outputs are configurable as either isolated relays or transistor outputs.

Isolated relays - 2 form A + 2 form C  
2A @ 30VDC/240VAC  
Transistors - 100mA sinking - 35V max.

### COMMUNICATIONS PORTS - 5

The AD2006 has five serial communications ports which support a number of communications formats and industrial standard protocols. Port 1 is normally used by the internal data radio, or connected to an external radio or modem.

Port 1 - Internal or external connection via either FFSK to 4800baud or RS232 to 115kB.

Port 2 - RS232 to 115kB.

Port 3 - RS485 to 115kB.

Port 4 - USB 2.0 Programming Port.

Port 5 - Ethernet 10/100Mb/s or RS232 to 115kB

### ANALOG INPUTS - 8

There are 8 analog input channels, 4 of which may be used as analog outputs with the plug-in 4 channel analog output option. Channel 8 can also be configured internally to monitor the DC supply to the module. All input channels are configurable as either :-

4-20mA / 1-5V	Resolution - 12 bits
0-20mA / 0-5V	Accuracy - 0.1%
0-1V	Linearity - 0.1%

### ANALOG OUTPUTS - 4

The last four analog channels can be configured as outputs by installing the plug-in 4 channel analog output option.

Output format 4-20mA	Resolution - 16 bits
	Accuracy - 0.1%
	Linearity - 0.1%

### RADIO and MODEM OPTIONS

There is an extensive range of data radios and modems available for the AD2006 modules. These include VHF, UHF, Spread Spectrum and Ethernet. Please see the radio specifications sheet for further details.

### COMMUNICATIONS PROTOCOLS

The AD2006 supports a number of industrial standard protocols which include :-

Allen Bradley DF1  
DNP3.0  
GE-Fanuc/Koyo CCM  
Modbus RTU/ASCII  
Modbus TCP  
OPC Server

Drivers for other third party devices are also available.

PLC CONTROL LOGIC - IEC61131.3 Ladder Diagram

### I/O EXPANSION MODULES

The field I/O of the AD2006 can be expanded up to 512 points by means of the range of I/O expansion modules available. These are DIN rail mounting units and up to 32 modules can be driven from the RS485 port of the AD2006. This means that they can be remote from the AD2006 module within the normal limits of RS485 communications.

Modules available :-

M16-LN	16 Digital Inputs	10-35VAC/DC
M16-HN	16 Digital Inputs	70-130VAC/DC
M16-TR	16 Relay Outputs	2A@ 30VDC/240VAC
M8-AD	8 Analog Inputs	4-20mA/1-5V, 0-1V 0-20mA/0-5V

### DATALOGGING - 1Mbyte Flash on-board memory.

Logging may be scheduled or event driven up to 100,000 time-stamped readings.

OPERATING TEMPERATURE -20 to +70 C °

POWER SUPPLY - 12 or 24VDC versions available.

Power consumption - typical :-

Without on-board radio - 1W  
With on-board radio - Receive only - 2.5W  
Transmit - 20W max.

WEIGHT - With internal data radio or modem - 960g.  
With no internal radio - 650g

DIMENSIONS - 202 X 178 X 60 Mounting plate supplied