



# Signal to Modbus Converter









### **OVERVIEW**

The ASHE ADM series Modbus Interface I/O modules are a range of micro-controller based Converters for Analog Inputs & Outputs and Digital Inputs & Outputs to RS485 Modbus Serial protocol. The ADM series instruments realize the signal acquisition between sensor and the host DCS. The instruments are offered in a highly compact execution, suitable for DIN Rail mounting. The RS485 signal output can be offered in either Modbus RTU or Modbus TCP/IP Master-Slave protocols (to be pre-specified).

The instrument can be factory configured for various types of analog signals, which need to be pre-specified. The instruments convert the Digital and Analog signals to a 16 bit digital format. The data is transmitted by the Modbus RTU or the Modbus TCP/IP protocol on RS-485 signal. The ADM series instruments are accurate to  $\pm\,0.1\%$  full scale and has less than  $\pm\,0.01\%$  /  $^{\circ}$ C thermal drift. Data transmission is done at 19200 Baud Rate.

The ADM series Converters are isolated between the Power Supply and the Digital Input to 1500 V AC, eliminates the effects of any ground loops and allows the use of the transmitter in heavy environmental conditions found in industrial applications.

The ADM Converters are designed with both, the Modbus RTU as well as the Modbus TCP/IP protocols (to be pre-specified), which allow the instrument to be directly interfaced to a wide range of PLC and SCADA applications.

### **SPECIFICATIONS**

Model ASHE ADM-48

ASHE ADM-7332

Type Microcontroller based Analog & Digital signal to

RS485 Modbus Converter.

ADM-48

Analog Input Signals 5 (4 to 20 mA, or, to be specified)

Digital Inputs 8 (+24 VDC, or, to be specified)

ADM-7332

Analog Input Signals

7 (4 to 20 mA, or, to be specified)

3 (0 to 10 VDC, or, to be specified)

Digital Inputs

3 (+24 VDC, or, to be specified)

2 (Relay Change over contacts)

Modbus Output Protocol Input Impedance (for mA)

Modbus RTU or Modbus TCP/IP (to be pre-specified)

47 Ohm.

**Isolation Input to RS-485** Optical 1500 V AC for 1 minute.

Thermal Drift ± 0.01% / °C.

Baud Rate 19200 bps.

Maximum Distance 1.2 km.

 Memory
 Non-Volatile (on EEPROM).

 Power Supply
 90 to 270 V AC, 50/60 Hz

 Dimensions
 75 x 100 x 110 mm [H x W x D]

EnclosureIndustrial Grade ABSExecutionDIN Rail mountingWeightApproximately 0.5 kgs.

**Operating Temperature** 0 to 55°C.

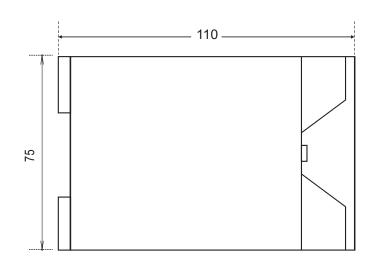
#### **FEATURES**

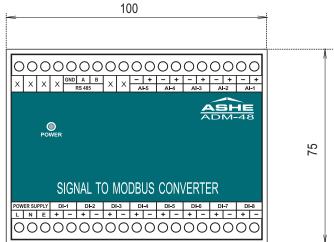
- Microcontroller based Signal Converter
- Range of Analog and Digital Input signal acquisition
- Analog and Digital output options
- Various Analog signal types possible
- Supports Modbus RTU or Modbus TCP/IP protocol outputs
- 12-bit Converter
- High Accuracy (> 0.1%)
- Isolation level of 1500 V AC for Digital inputs.
- Baud Rate of 19200 (can be modified)
- High reliability
- Compact DIN Rail mount execution
- Universal AC Power Supply
- Compact dimensions 75 x 100 x 110 mm [H x W x D]
- Very low power consumption
- Negligible heat dissipation
- Proven track record



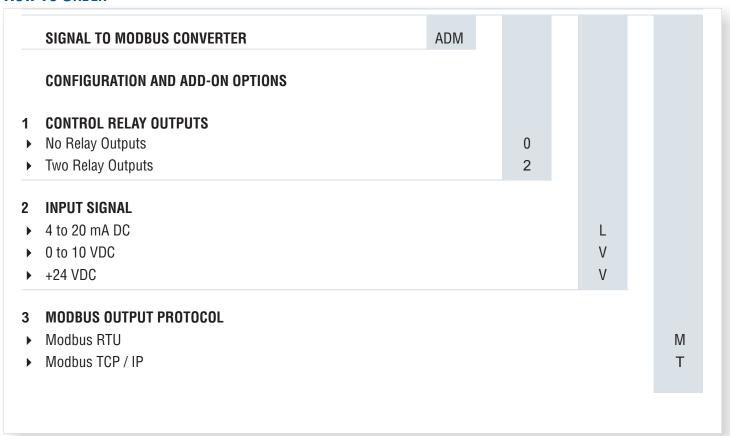
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## **DIMENSIONAL DIAGRAM**





### How To Order



## **OUR OTHER PRODUCTS**











FLOW TOTALIZER

SIGNAL ISOLATORS & TRANSDUCERS

TEMPERATURE SCANNER

FLAMEPROOF INSTRUMENTS

STATIC POWER SWITCHES



Designed and Manufactured by :

### **ASHE CONTROLS PRIVATE LIMITED**

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