



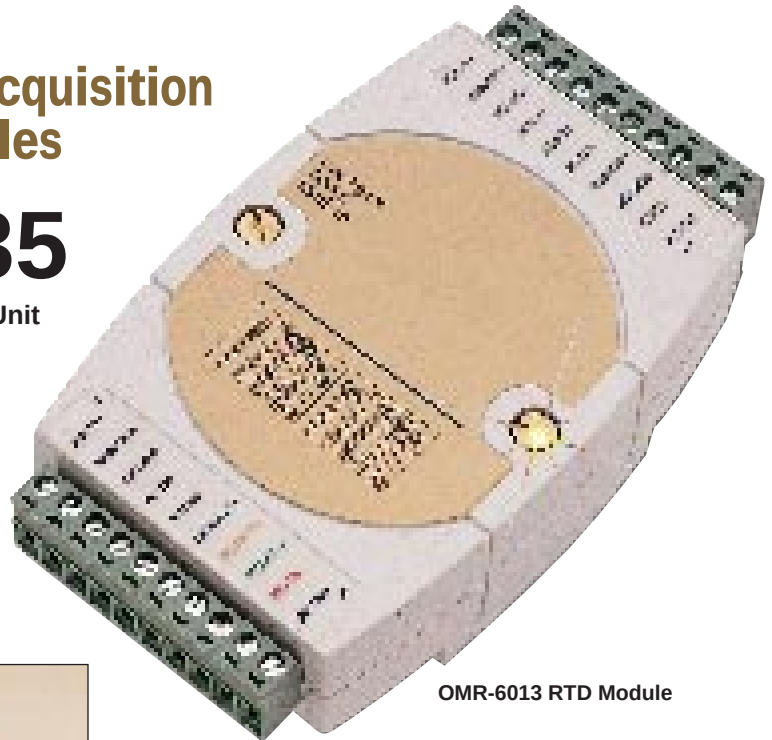
OMR Series

Intelligent Data Acquisition and Control Modules

- ✓ Provides Direct Computer Link from Most Sensors
- ✓ Communicates Using 2-Wire RS-485
- ✓ Connect up to 128 Modules to One RS-232 Port Using RS-485 Converter
- ✓ 5000 Vrms High Voltage Isolation
- ✓ DIN Rail Mountable

\$135

Basic Unit



OMR-6013 RTD Module



The OMR Series Conveniently Mount on a DIN Rail

The OMR Series module is an intelligent data acquisition and control device designed for data acquisition systems based on PCs and other processor-based equipment with standard RS-232 serial I/O ports. The modules convert analog input signals to engineering units and transmit, in ASCII format, to any host computer via 2-wire RS-485. When using an OMR Series RS-232/RS485 converter, up to 128 OMR modules can be connected directly to a standard RS-232 serial port. The OMR Series are the key components in flexible and cost effective distributed data acquisition and control systems.

OMR Series modules provide direct linkage to a wide variety of sensors and perform intelligent signal conditioning, scaling, linearization and conversion. The modules can be used to measure thermocouples,

RTDs, pressure, flow, voltage, current, and numerous other types of analog and digital signals.

OMR Series modules are designed for challenging industrial environments. They offer 5000 Vrms high voltage isolation and a watchdog timer for industrial applications. Additional features including PCB surface coating and noise immunity are provided in the OMR Series, and make it especially suitable for harsh environments. OMR modules include a PCB surface coating that allows superior resistance to environmental conditions, including humidity, salt spray and most harsh chemicals.

An electrode film is coated on the inside ABS case, which improves radio frequency (RFI) and electromagnetic (EMI) noise reduction.

Specifications

ANALOG INPUT MODULE

Sample Rate: 10 samples/sec
Accuracy: $\pm 0.05\%$ or better for OMR-6011, 6012, 6013, 6014D; $\pm 0.1\%$ or better for OMR-6017, 6018

Resolution: 16-bit

ANALOG OUTPUT MODULE

Resolution: 12-bit
Accuracy: OMR-6021, $\pm 0.1\%$ for current range, $\pm 0.2\%$ voltage range, OMR-6024, $\pm 0.05\%$

DIGITAL I/O MODULES*

Digital Outputs: open collector to 30 V, 30 mA max. load
Digital Inputs: +1 V (max) low, +3.5 V to 3 DV high

Common Module Specifications

Power Requirements: unregulated 10 - 30 Vdc

Power Consumption: 0.35 to 2 watts, model dependant

Communications: 2-wire RS-485

Baud Rates: 1200, 2400, 4800, 9600, 19.2K, 38.4K bps, selectable

Communications distance:

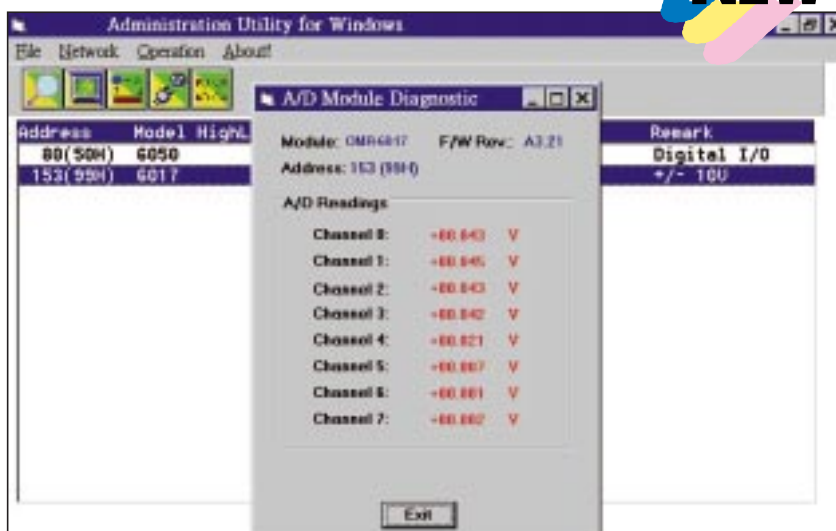
up to 4000 feet

Isolation: 5000 Vrms (serial port)

*The OMR-6058 has TTL level outputs and inputs



OMR-6011D Analog Input Module
with Digital Display



Included OMR Windows utility software provides configuration,
performance evaluation, diagnostics and calibration

To Order (Specify Model Number)

Model No.	Price	Description
OMR-6011	\$195	1 channel thermocouple (J, K, T, E, R, S, B, N, C), mV (± 15 , 50, 100 500 mV), V (± 1 , 2.5 V) or mA (± 20 mA) programmable input module
OMR-6011D	245	Same as OMR-6011 with 5 $\frac{1}{2}$ -digit LED display
OMR-6012	195	1 channel mV (± 150 , 500 mV), V (± 1 , 5, 10 V) or mA (± 20 mA) programmable input module
OMR-6012D	245	Same as OMR-6012 with 5 $\frac{1}{2}$ -digit LED display
OMR-6013	275	3-channel RTD input module (Pt-100, Ni-100 or Ni-120 RTDs)
OMR-6017	245	8-channel mV (± 150 , 500 mV), V (± 1 , 5, 10 V) or mA (± 20 mA) programmable input module (6 differential, 2 single-ended inputs)
OMR-6018	245	8-channel thermocouple input module (J, K, T, E, R, S, B, N, C)
OMR-6021	195	1-channel analog output module (0-10 V or 0-20 mA)
OMR-6024	245	4-channel analog output module (-10 V to +10 V)
OMR-6050	135	15-channel digital I/O module (7 inputs, 8 open collector outputs)
OMR-6052	135	8-channel isolated digital input module (6 fully independent isolated channels, 2 isolated channels with common ground)
OMR-6053	135	16-channel digital input module
OMR-6054	150	15-channel isolated digital input module
OMR-6056	150	15-channel isolated digital output module
OMR-6058	255	24-channel TTL digital I/O module (8255 PPI mode 0 emulation)
OMR-6060	135	Relay output and digital input module (4 relay outputs, 2 form C and 2 form A, 0.6 A @125 Vac) and 4 digital inputs
OMR-6080	195	2-channel 32-bit frequency/counter input module (100 kHz max)
OMR-6510	95	RS-485 repeater
OMR-6520	95	RS-232-to-RS-485 converter (required to connect modules to RS-232 PC serial port) contains DB 9-pin female RS-232 connector
DRN-PS-1000	150	24 Vdc power supply, 1 A

All OMR modules come with Windows configuration utility software and operator's manual. Order modules, power supply and RS-485 converter if connecting to an RS-232 port. More than one power supply may be necessary for large applications.

Ordering Example: Five **OMR-6011** input modules, **OMR-6520** converter and **DRN-PS-1000** power supply, 5(\$195) + 95 + 150 = **\$1220**

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