

## Communication Series Controllers

### C267 Standard Input/Output

- MODBUS RTU I/O Extender
- Shunt Selectable Analog Types
- Rugged Design
- UL/cUL Listed Class 1 Div. 2 Groups C & D

#### Description

The C267 communications module adds standard input/output capability to existing and future Murphy controllers via MODBUS RTU communication using an RS-485 port. The C267 module can also be used with PLC's manufactured by others and for gathering information from remote sensors.

#### Specifications

##### Digital Inputs:

8 - optically isolated inputs. Each accepts either B+ or B- for activation.

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##### Analog Inputs:

7 - each analog input is hardware selectable to read the following end devices: 4-20 mA, 0-5 VDC, and/or Electric Gauge Sending Units. These analog inputs can be configured independently.

##### Frequency Inputs:

1 - Optically Isolated Frequency input requiring at least 2Vrms for activation. Used for speed reference. Range: 60 - 10,000 Hz.

##### Outputs:

8 - FET Outputs consistent with use in Class 1 Division 2 Hazardous areas. Each output rated at 5 Amps. Total current draw through unit not to exceed 18 Amps when both PWR2 pins are connected.



C267

C267  
C277  
C287

### C277 Temperature Sensing

- MODBUS RTU I/O Extender
- Precision Temperature Scanning
- Reads Thermocouples and 4-20 mA Analogs
- 18 Channels in One Unit
- Channel Configuration Done Via MODBUS Communications
- UL/cUL Listed Class 1 Div. 2 Groups C & D

#### Description

The C277 communications module adds precision temperature sensing capability to existing and future Murphy controllers via



C277

MODBUS RTU communication using an RS-485 port. The C277 module can read up to 18 thermocouples and/or mA sources.

#### Specifications

**Inputs:** 18 - can be configured to read thermocouples or end of line 0-24 mA (4-20 mA)m signals.

##### Application:

For maximum temperature accuracy the C277 should be at a constant temperature with no channels assigned to 4 to 20 mA signals. The unit will still achieve excellent accuracy with slowly varying temperature as long as the temperature source is not a point source.

### C287 Analog Inputs and Outputs



C287

- MODBUS RTU I/O Extender
- Precision Analog Inputs and Outputs
- Rugged Design
- UL/cUL Listed Class 1 Div. 2 Groups C & D

#### Description

The C287 module adds true current analog input and output capability to existing and future Murphy controllers via MODBUS RTU communications. The C287 can be used with PLC's manufactured by others or for gathering data from remote locations.

#### Features

- MODBUS Address Select Shunts: These shunts allow you to assign a unique address to each module that may be in the system.
- RS-485 Communication Port: There are two electrically common jacks for wiring convenience. The last module in the chain must have a terminating resistor module.

#### Specifications

##### Inputs:

4 - 15 bit true 0-20 mA

##### Outputs:

4 - 16 bit analogs, software configurable to 0-24 mA, 0-20 mA, or 4-20 mA



for more information:

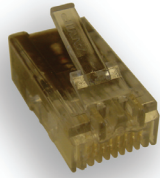


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## Accessories and Part Numbers for Use with FW Murphy Comm Series Modules:

**C267 - C277 - C287**  
**Communication Series Controllers**

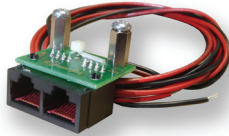
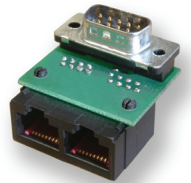


### Terminating Resistor Module

**Part Number:** 65267485TERMM  
**Function:** Provides the RS-485 terminating resistor to the last module in the group.

### RJ45 to DB9 (EMS547 only)

**Part Number:** 65267RJ2DBM  
**Function:** Adapts the DB9 Port 3 on the EMS547 to the RJ45 for use in connecting between the EMS547 and the module.

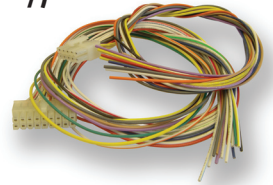


### RJ45 to 2 Wire Adapter for use with Non-EMS547 Controllers

**Part Number:** 65267RJ2447M  
**Function:** Provides an RJ45 to 2-wire adapter for use in connecting to the module.

### 2 Foot Harness Kit (C267 only)

**Part Number:** 35267HRNSKIT  
**Function:** Provides a wire harness connection to the module. Each lead is 2 feet long and individually color-coded.



### RJ45 Patch Cables

**Part Number:**  
 One foot (1') – 65267CABLE1  
 Two Foot (2') – 65267CABLE2  
 Four foot (4') – 65267CABLE4  
 Six foot (6') – 65267CABLE6

## Common Product Specifications for All Modules

**Input Voltage:**  
9 to 28 VDC

**Operating Temperature:**  
–22° to +158° F (–30° to +70° C)

**Storage Temperature:**  
–22° to +158° F (–30° to +70° C)

**Communications:**  
 1 – RS-485 9600-N-8-1 Communication port.  
 Connection is made via modular RJ45 jack.  
 There are two jacks for simple connection to other Comm Series Modules. If more than one module is used, you can bring your patch cable into Port A and then connect from Port B to the next module. This can be repeated until your input/output resources are satisfied. The last module in line must have a terminating resistor (part # 65267485TERM) installed in the second jack. A maximum of 32 devices can be hooked together.

**Product Weight:**  
1.5 lb. (0.7 kg.)

**Product Dimensions:**  
7.0"H x 1.5"W x 4.75"D (178 x 38 x 121 mm)

**Shipping Weight:**  
2.2 lb. (1.0 kg.)

**Shipping Dimensions:**  
12.0"H x 6.0"W x 6.0"D (304 x 152 x 152 mm)

## How To Order

<b>C267</b>	Standard Input/Output Module
<b>C277</b>	Temperature Sensing Module
<b>C287</b>	Analog Inputs and Outputs Module
<b>65267485TERMM</b>	Terminating Resistor Module
<b>65267RJ2DBM</b>	RJ45 to DB9 (EMS547 only)
<b>65267RJ2447M</b>	RJ45 to 2 Wire Adapter (non-EMS547)
<b>35267HRNSKIT</b>	2 Foot Harness Kit (C267 only)
<b>65267CABLE1</b>	One foot (1') - RJ45 Patch Cable
<b>65267CABLE2</b>	Two foot (2') - RJ45 Patch Cable
<b>65267CABLE4</b>	Four foot (4') - RJ45 Patch Cable
<b>65267CABLE6</b>	Six foot (6') - RJ45 Patch Cable

MURCAL PROUDLY DISTRIBUTES:



FW Murphy Distributor and Service Representative:



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The specifications and performance data is  
subject to change without notice.