

ROC800-Series MVS I/O Module

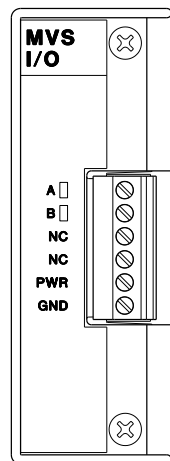
The Multi-Variable Sensor Input/Output (MVS I/O) module provides differential pressure, static pressure, and temperature inputs to the ROC800-Series Remote Operations Controller (ROC800) for flow calculation of differential type meters.

The MVS I/O module provides the isolated, short-circuit current-limited power required to connect up to six remote MVS transmitters (see *Product Data Sheet MVS205*). The MVS I/O module provides EIA-485 (RS-485) communications and power to external remote MVS transmitters.

Each connected MVS transmitter is scanned once every second with values for differential pressure, static pressure, and temperature being accessed for inputs for flow calculations, history, calibration, and alarming.

The module is isolated from other modules and the backplane. The field interface protects the electronics in the module. The module reduces the effect of noise on communication errors through filtering.

The module has removable terminal blocks for convenient wiring and servicing. The terminal blocks can accommodate size 16 to 24 American Wire Gauge (AWG).



D0C0732A

MVS I/O Module

Compatibility and Installation

Installation and replacement of the module is easily accomplished by removing the two captive screws accessible from the front of the unit.

MVS I/O modules can be installed in the following module slots.

	Series 1 ROC809	Series 1 ROC827	Series 2 ROC809	Series 2 ROC827
Slot	1, 2, 3	1, 2, 3	Any	Any

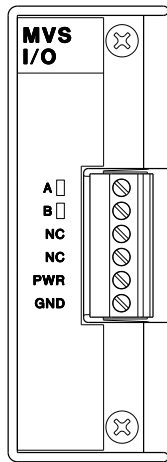
The MVS I/O module can easily be installed or removed from the module slots at any time; modules are held in place by two captive screws. The modules are hot-swappable, meaning the module can be removed and another module of the same kind can be installed under power. The modules are hot-pluggable, meaning they may be installed directly into unused module slots under power. The module is also self-identifying via ROCLINK™ 800 Configuration Software.

You configure the module using ROCLINK™ 800 Configuration Software. You can configure the units of measurement for each transmitter as follows:

	Differential Pressure Units	Static Pressure Units	Temperature Units
English Units	In H ₂ O at 60 ° F or 68 ° F	PSI	Deg F
Metric Units	kPa	kPa	Deg C

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Field Wiring Terminals



Terminal	Label	Definition
1	A	Receive / Transmit +
2	B	Receive / Transmit -
3	NC	No Connection
4	NC	No Connection
5	PWR	+ (Sensor Power)
6	GND	- (Common)

Communications

Provides communications interface and field power for up to six remote MVS transmitters. One-second updates occur for differential pressure, static pressure, and temperature for each of the attached transmitters.

Power

Consumption Main power supply loading at the Battery Terminals (at 12.0 V dc):

12 V Power Module (at 12.0 V dc)	325 mW typical (not including sensors).
24 V Power Module (at 24.0 V dc)	300 mW typical (not including sensors).

Isolation	Field to Logic	1500 V dc, 1-minute minimum
	Field to Power	1500 V dc, 1-minute minimum
	Module to Module	1500 V dc, 1-minute minimum

Physical

Dimensions	26 mm W by 75 mm H by 133 mm D (1.03 in. W by 2.96 in. H by 5.24 in. D).	
LEDs	A (Upper)	On when transmitting.
	B (Lower)	On when receiving.
Weight	113.4 g (4 oz).	
Wiring	16–24 AWG at the removable terminal block.	

Environmental

Same as the unit in which it is installed.

Approvals

Same as the unit in which it is installed.

For customer service and technical support, visit www.EmersonProcess.com/Remote/Support.

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