MyDro Expansion Modules

Increase the monitoring possibilities of the MyDro remote terminal unit.

Expand MyDro 150 and 850 possibilities with MyDro Expansion Modules. The MyDro remote terminal unit (RTU) automatically recognizes the module when it is installed. The readings will be presented on the MyDro LCD screen and your web portal immediately.

Configurable options are presented on the LCD screen under the "Config." button. Your web portal is used to create alarm notification rules for the new I/O including alarm delays, analog thresholds, and flow (pulse) thresholds.

Analog Input, Analog Output, and Digital Input Expansion Modules are most suitable for the Mydro 850 series RTU. Pulse Input Expansion Modules can be used on either the MyDro 150 or 850 series RTUs. Setup forms for the modules are available online.

The expansion modules provide signal conditioning, isolation, ranging, A/D, and D/A conversion. Digital communication to the MyDro is based on a unique device ID and communications cable (RS485 2-wire, plus power). The device ID has been set by Mission at the factory as indicated on the label. One of each expansion module can be included on a single MyDro with the exception of the Pulse Input, as described below. Modules are daisy-chained (wired in parallel) on the same data bus via the included communications cable.

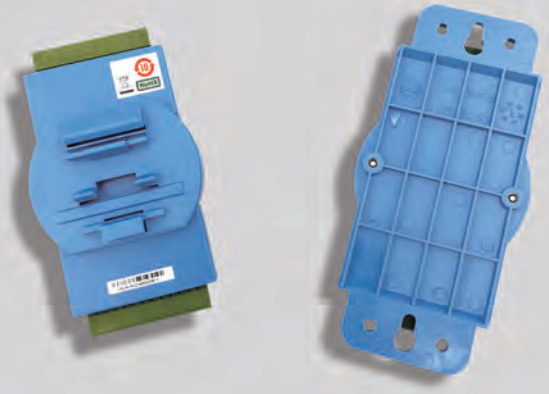
Analog Input Expansion Module
The two on-board analog inputs can be expanded to six with the Analog Input. 4–20 mA or 0–5 VDC signals can be selected by an internal jumper and configuration at the MyDro touch screen.

Analog Output Expansion Module
The Analog Output can be used to remotely change chemical dosers, variable frequency drives, or variable position valves, either manually or automatically. Output signals can be configured as 4–20 mA.

Digital Input Expansion Module
The eight on-board digital inputs can be expanded to 16 with the Digital Input. The inputs can be connected to instruments that provide a dry switch closure or a powered signal up to 50 VDC.

Pulse Input Expansion Module
The Pulse Input is used with pulse-based flow meters or rain tipping buckets. Each expansion module supports two pulse input channels. The MyDro supports two expansion modules yielding a total of four pulse channels. Dry contact or wetted up to 5 VDC are supported.

- **Easy to install**
- **Expands RTU inputs and outputs**
- **MyDro supports one of each expansion module simultaneously**
- **Included communications cable capable of long distances (RS485)**

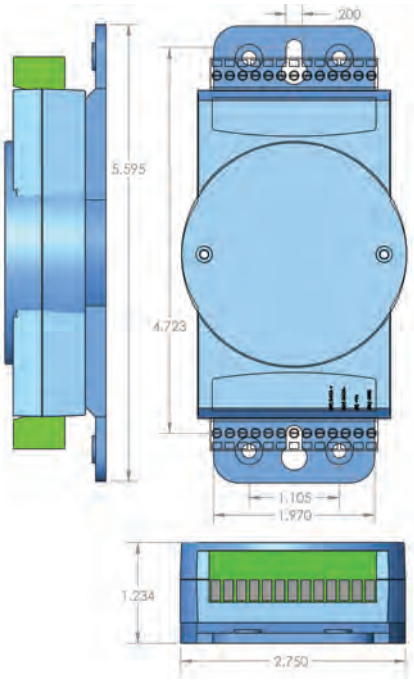


- **DIN rail mount**
- **Flat back mount**

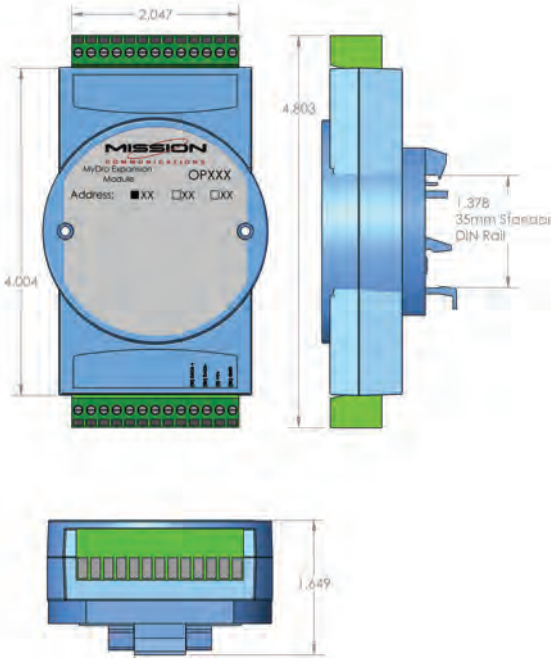
Dimensions

Interchangeable Mount Options

Direct Mount



DIN Rail Mount



Specifications

Data	Description	Analog Input	Analog Output	Digital Input	Pulse Input
	Mission Product Number	OP465	OP461	OP653	OP464
	Device ID (decimal)	20	40	10	30
I/O	Channels	4	2	8	2
	Voltage on terminals	In: 0–4 mA or 0–5 VDC	Out: 4–20 mA	Dry or isolated, 0–50 VDC	Dry or wet, up to 5 VDC
	Input Impedance	Current: 120 Ω Voltage: 20M Ω	0.5 Ω out, max current load is 500 Ω	5.2K Ω	50M Ω
	Timing	N/A	N/A	N/A	Minimum 8 msec, high and low, max frequency 60 Hz
Communications	Cable (PN CP500)	Jacketed with RJ45 terminal on MyDro end, tinned on other, 2 conductors for data, 2 for power			
	Protocol	RS485 (2-wire Data+, Data-)			
	Maximum communication distance	4,000 feet, voltage drop of included power must be considered			
	Indicators	Power, communications		Power, communications, DI	Power, communications
	Asynchronous Data Format:	Handled by MyDro (no config required) 1 startbit, 8 databits, 1 stopbit, no-parity, with checksum			
	RS 485 Transient Suppression	Yes			
Power		10–30 VDC, unregulated, protected against power reversal			
	Maximum power (including instruments)	1.2 W	3 W	1 W	2 W
Mech.	Case	ABS and PC with captive mounting hardware			
	Included mounting plates	35 mm DIN rail or direct panel mount			
Terminals	Wire gauge	14–28 AWG			
	Mission PN	CP501	CP502		CP501
Service		Requires service package (PN SPOP-12)			
Environment	EMI	Meets FCC Class A or CE			
	Temperature	10–70° C			
	Humidity	5–95%, non-condensing			

MISSION COMMUNICATIONS

(877) 993-1911 • sales@123mc.com • 123mc.com

Literature Code: ME-0218