

Meters

Local Display for Expro ActiveSONAR™ Flow Meter

The precision digital PD8-6080 display comes pre-configured as an accessory for the Expro ActiveSONAR $^{\rm TM}$ flow meter.

The unit provides a local display of flow rate at actual (line) conditions and a 4-20mA output of the actual flow rate. Up to 15 Expro ActiveSONAR[™] flow meter diagnostic parameters can also be displayed.

Housed in an explosion-proof/flameproof enclosure, the display is certified for installation in hazardous areas ATEX Zone 1, IECEx Gb, and US and Canada class 1, division 1.

It is available in a 24VDC-powered version or an 85 to 265VACpowered version (specify power input type when ordering). Pole or pipe-mounting kits available.

Standard Configuration Features

- Displays actual volumetric flow rate and up to 15 other ActiveSONAR flowmeter diagnostic parameters
- Outputs volumetric flow rate at actual (line) conditions via 4-20mA output with scaling can be configured via front panel

Bespoke Configuration Options

- Can be changed to display and/or output via 4-20mA the actual flow velocity instead of the volumetric flow rate
- Can be used to display results from more than one ActiveSONAR flow meter
- Offers additional Modbus capabilities that permit other installation scenarios including displays at multiple locations for the same flow meter
- Has two 4-20mA inputs (not used for off-the-shelf configuration) which can be used to display scaled versions of the 4-20mA inputs or computed results based on the 4-20mA inputs and ActiveSONAR flow rate





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Technical specifications		Creations	Commonte
Parameter		Specifications	Comments
Enclosure		Explosion-proof die-case aluminium	Corrosion resistant epoxy coating
Display		6-character, 2-line	15mm (0.6") top, 12mm (0.46") bottom
Display type		7-segment LED	
Display orientation		Can be rotated 0°, 90°, 180°, 270°	
Keypad		4 key, thru-glass operation	
Cable entries		4 x ¾" NPT	
Internal connectors		Removable screw terminal blocks	Accepts up to 2.5mm ² (12 AWG) wire
Enclosure rating		IP66, NEMA 4X	
Operating temperature		-40°C to +65°C (-40°F to 149°F)	
Storage temperature		-40°C to +85°C (-40°F to 185°F)	
Humidity		0 to 90% RH, non-condensing	
Certifications		ATEX (Zone I IIC), IECEx (Gb, IIC)	
		USA and Canada (CI I Div 1, Groups B, C, D),	
		CE marked	
Haz area method of protection		Ex d (flameproof)	
Haz area temperature code		Τ5	
Power requirements			
	AC version	85-265VAC, 50/60Hz, 15W max	
	DC version	+24VDC +/-10%, 15W max	
Dimensions (W x H x D)		163 x 202 x 215mm (6.42" x 7.97" x 8.47")	
Weight		16lbs (7.26kg)	
Mounting		Pole or pipe mount	Kits available for 1.5" to 2.5", or 3" to 20" pipes
RS-485 Interface			Kits available for 1.5 to 2.5, or 5 to 20 pipes
RS-405 Interface	Tuese		
	Type	Half-duplex or full-duplex	- - - - ActiveSONAR communications are half-duple; - -
	Baud rates	300 to 19,200 bps	
	Max bus length	<u>1,200m (3937ft)</u>	
	Data bits	8	
	Start bits	1	
	Stop bits	1 or 2	
	Parity	Even, odd or more	
Modbus protocol			
	Modbus type	Master	Also supports slave and snooper modes
	Format	RTU	
	Max no. of process variables	Up to 16 Modbus registers	
	Function codes	03, 04 and 65	
	supported	, - ·	
	Data types supported	Signed/unsigned short/long, integers, floating point	
	Byte orders supported	1234, 4321, 2143, 3412	
Isolated 4-20mA output			
	Source	Any of the displayed variables	- - - Default is actual volumetric flow rate configurable -
		Internal or externally sourced	
	Type		
	Load impedance	10 to 750 Ohms	
	Accuracy	+/- 0.1% of span +/- 0.004mA	
	Temperature	0.4uA/°C max from 0°C to 65°C (32°F to 149°F)	

Note: Other sizes and configurations are available to meet most applications, for more information contact your local Expro representative or email meters@exprogroup.com