

Acumen

Local Display for Expro ActiveSONAR™ Flow Meter

The precision digital PD8-6080 display comes pre-configured as an accessory for the Expro ActiveSONAR™ 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 265VAC-powered 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		
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 3/4" 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	T5	
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		
	Type	Half-duplex or full-duplex
	Baud rates	300 to 19,200 bps
	Max bus length	1,200m (3937ft)
	Data bits	8
	Start bits	1
	Stop bits	1 or 2
	Parity	Even, odd or more
Modbus protocol		
	Modbus type	Master
	Format	RTU
	Max no. of process variables	Up to 16 Modbus registers
	Function codes supported	03, 04 and 65
	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
	Type	Internal or externally sourced
	Load impedance	10 to 750 Ohms
	Accuracy	+/- 0.1% of span +/- 0.004mA
	Temperature sensitivity	0.4uA/°C max from 0°C to 65°C (32°F to 149°F) 0.8uA/°C max from -40°C to 0°C (-40°F to 32°F)

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