

# 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



# Acumen

## Local Display for Expro ActiveSONAR™ Flow Meter

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 ¾" NPT	
Internal connectors	Removable screw terminal blocks	Accepts up to 2.5mm <sup>2</sup> (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
<b>RS-485 interface</b>		
	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
<b>Modbus protocol</b>		
	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
<b>Isolated 4-20mA output</b>		
	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@expro.com](mailto:acumen@expro.com)