

## Hazardous Area Rated Local display with 4-20mA Output

The Precision Digital PD8-6080 display comes pre-configured by Expro Meters as an accessory for the ActiveSONAR™ flow meter. The unit provides a local display of Flow Rate at Actual (Line) conditions and a 4-20mA output of Actual Flow Rate. Optionally, up to 15 ActiveSONAR™ flow meter diagnostic parameters may also be displayed.

Housed in an explosionproof/flameproof enclosure, the display is certified for installation in hazardous areas (US and Canada Class I, Division 1, ATEX Zone 1, and IECEx Gb).

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.



### Off-the-shelf configuration

- 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. Scaling can be configured via front panel.
- Pre-configured for diagnostic parameters, which can be enabled or disabled via front panel.

### Customization (discuss with Expro Meters)

- 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™ flowmeter – though can only output one meter reading via 4-20mA output.
- Has other Modbus capabilities (e.g. “Snooper mode”) that permit other installation scenarios including displays at multiple locations for the same flowmeter.
- Has two 4-20mA inputs (not used for off-the-shelf configuration) and 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.

# Local Display for ActiveSONAR™ Flow Meter



Technical specifications:		
Parameter	Specifications	Comments
Enclosure	Explosion-proof die-cast aluminum	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 <sup>2</sup> (12 AWG) wire
Enclosure Rating	IP66, NEMA 4X	
Operating Temperature	-40°C to +65°C	
Storage Temperature	-40°C to +85°C	
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	7.26kg (16 lbs)	
Mounting	Pole or pipe mount	Kits avail for 1.5" to 2.5", or 3" to 20" pipes
RS-485 Interface		
Type	Half-duplex or full-duplex	ActiveSONAR™ comms are half-duplex
Baud Rates	300 to 19200 bps	
Max Bus Length	1200m (3937ft)	
Data Bits	8	
Start Bits	1	
Stop Bits	1 or 2	
Parity	Even, odd or none	
Modbus Protocol		
Modbus Type	Master	Also supports slave and snooter modes
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	Default is Actual Volumetric Flow Rate
Type	Internal or Externally Sourced	Configurable
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 0.8uA/°C max from -40°C to 0°C	