

MODEL 120A

FEATURES

- Non-linear Tank Correction
- Four Level Alarms
- Fully Programmable
- Level Bar Graph Display
- Tank Contents Display
- Powered by 4-20mA Loop
- Panel, Wall and Pipe Mounting
- Watertight to IP67 (Nema 4X)
- CE Compliant



LOOP POWERED

Level Monitor



The 120A Level Monitor accepts a 4-20mA signal from a wide range of level sensors, including Pressure Transmitters, Ultrasonic Sensors or Capacitance Probes, and displays both level and tank contents on a large LCD display.



Field Mounting Level Monitor

PROVEN IN THOUSANDS OF FIELD INSTALLATIONS THROUGHOUT THE WORLD.

The 120A is a high accuracy Level Monitor designed to operate with analogue level sensors. Having an IP67 weatherproof case, tactile keyboard and various mounting options, makes it a very versatile unit.

Solid state relay outputs provide up to four level alarms and a 25 point non-linearity correction table allows the instrument to be programmed to fit most tanks.

The Level Monitor is powered entirely from the 4-20mA current loop and, therefore, requires no external power or batteries.

The instrument is fully programmable with set-up parameters such as span, offset,

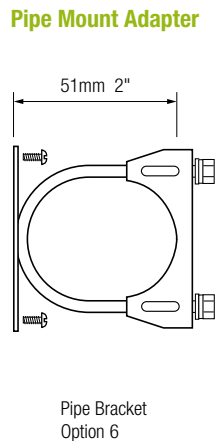
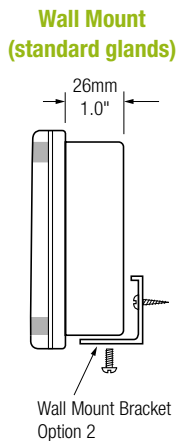
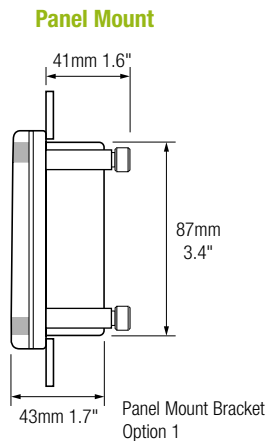
alarm levels, etc, stored in a non-volatile memory which will retain all data for more than 10 years without power.

The monitor is housed in a rugged, yet attractive, IP67 (Nema 4X) polycarbonate enclosure which is completely watertight. A wall mounting bracket (no gland holes) is supplied as standard, while panel and pipe mounting brackets are available as options.

DIMENSIONS

Overall Sizes

151mm (5.9") width
98mm (3.9") height
43mm (1.3") depth



TERMINAL DESCRIPTIONS

Terminal Inputs & Outputs			
Number		Number	
1	Low-low Alarm (-)	7	High Alarm (-) or Pulse (-)
2	Low-low Alarm (+)	8	High Alarm (+) or Pulse (+)
3	4-20ma Input (-)	9	High-high Alarm (-)
4	4-20ma Input (+)	10	High-high Alarm (+)
5	Low Alarm (-)		
6	Low Alarm (+)		

PRODUCT CODES

Product Code & Mounting Types		
120A	•	Level Monitor
Enclosure Mounting	0	Wall Mounting (no gland holes)
	1	Panel Mount Brackets
	2	Wall Mounting (standard glands)
	6	Pipe Mount Adapter

Typical Part Number: 120A .2

GENERAL SPECIFICATIONS

Operating

Temperature Limits: -20 to +60°C,
-4 to +140°F

Enclosure

Cable Entry: By cable gland
Materials: Polycarbonate and ABS

Display

Level: 20 segment LCD bar graph
Level Span: 0...100% proportional to input signal. Non-inverting tanks - 0% equals 4mA and 100% is 20mA. Inverting tanks - 0% equals 20mA and 100% is 4mA
Contents: 7 digit 12mm (0.48") high LCD (continuously powered) with 4 1/2 digital resolution and trailing zeros
Interference: CE compliance

4-20mA

Resolution and Linearity: 0.05% of span
Accuracy: 0.05% of span @ 25°C, 0.1% (typically) of span full temperature range
Update Time: 0.5 second
Connection: 2 wire
Voltage Drop: 2.5V maximum

High & Low Alarms

Type: 4 x open collector outputs suitable for driving DC solenoid or external relays. The outputs provide: 1. high-high, 2. high, 3. low, 4. low-low
Switching Power: 200mA, 30Vdc maximum
Saturation Voltage: 0.8Vdc typical across the output in the "ON" state
Isolation: All outputs are separately opto-isolated

Instruments within the Contrec family:

100 Series – Accurate process instruments for field mounting applications

200 Series – Intrinsically safe, precise and reliable process instruments

400 Series – Rugged and dependable batch and flow control solutions

505 Series – Next generation flow instruments for a variety of applications

515 Series – Precise flow and batch control for more complex applications

1000 Series – Robust load computers for petroleum and chemical applications

TRAC 40 – Vehicle mount custody transfer approved registers



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