

Explosion Proof Digital Display Panel Meter Series: DDX



The Series DDX Explosion Proof Digital Display is a two-line, analog-input panel meter with Class I, II, and III, Division 1 Explosion proof approvals. With two configurable, six-character lines and eight LED alarm indicators, the DDx fits a lot of information in a compact area. The DDX is easily programmed with the four buttons on the face or through a USB connection to a PC. DDX has the versatility and functionality you need from an explosion proof panel meter.

Features

- 2-line, 6-character display
- Easy 4-button programming
- Explosion-proof housing meets NEMA 4X, 7, 9, & IP68
- Current Inputs: 4-20 or 0-20 mA
- Voltage Inputs: 0-5, 1-5, 0-10 VDC
- 1 Digital Input / Input Contact
- Current Output: Isolated 4-20 mA
- Relay Outputs: 2 or 4 SPDT Relays
- Up to 25 mA @ 24 VDC available for powering sensor
- Configurable High/Low alarms
- Alternating Pump Control (with output relays)
- Eight user-selectable display intensity levels



DDX Specifications



Performance

- Display:
 - 2 lines, 6 characters each
 - Top line: 0.6" (15mm) characters
 - Bottom line: 0.46" (12mm) characters
- Display Update Speed:
 - 200 ms (5 updates per second)
- Accuracy:
 - ±0.03% of calibrated span

Connectivity

- Input Options:
 - 0-20 mA, 4-20 mA
 - 0-5 VDC, 1-5 VDC, 0-10 VDC, ±10 VDC
- Output Options:
 - 2 or 4 SPDT Relays
 - Isolated 4-20 mA
- Sensor Power Supply
 - 24 VDC, up to 25 mA

Environmental

- Front panel rating: NEMA 4X, IP65
- Storage Temp: -40° - 185°F (-40° - 85°C)
- Operating Temp: -40° - 149°F (-40° - 65°C)

Physical

- Size:
 - 6.42" x 7.97" x 8.47" (163 mm x 202 mm x 215 mm)
- Weight:
 - 16.0 oz (7.26 kg)

Electrical

- Supply Voltage:
 - VAC: 85 - 265
 - VDC: 12 - 24
- Input Impedance:
 - Voltage Inputs: > 500 kΩ
 - Current Inputs: 50 - 100 Ω
- SPDT Relays:
 - 3 A @ 30 VDC / 125/250 VAC resistive loads
 - 1/14 HP (≈ 50 W) @125/250 VAC inductive loads
- Input Contact/Digital Input
 - Contact Voltage: 3.3 VDC
 - Digital Input Logic High: 3 - 5 VDC
 - Digital Input Logic Low: 0 -1.25 VDC
 - Default Logic: Normally Open/Low

Programming


- Programmable Features:
 - Min/Max, Tare, Hold
 - Multi-scale Input Display (e.g. Level & Volume)
 - Noise Filter
 - High/Low Alarms
 - Alternating Pump Control
 - Time Delay for Output Relays
- Methods:
 - 4 Front-panel Push Buttons
 - MeterView Pro Software (with PC)

Common Model Configurations

Din Mount Digital Display

Model Number	Model Description
DDX-A00	85 - 265 VAC input power, No outputs (visual display only)
DDX-A10	85 - 265 VAC input power, 4-20 mA output
DDX-A14	85 - 265 VAC input power, 4-20 mA output, 4 output relays
DDX-D00	12 - 24 VDC input power, No outputs (visual display only)
DDX-D02	12 - 24 VDC input power, 2 output relays
DDX-D14	12 - 24 VDC input power, 4-20 mA & 4 output relays

Certification

- FM Certificate #3047283
Enclosure: Type 4X; IP66
Class I, Div. 1, Groups B, C, & D;
Class II, Div 1, Groups E, F, & G;
Class III, Div 1, T5/T6
Class I, Zone 1, AEx d, IIC Gb T5/T6
Zone 21, AEx tb IIIC T90°C; Ta -40°C to +65°C
T6 Ta= -40°C to +60°C; T5 Ta= -40°C to +65°C
- CSA/cCSAus Contract #2531731
Class I, Div. 1, Groups B, C, & D;
Class II, Div 1, Groups E, F, & G;
Class III, Div 1
Class I, Zone 1, Ex d, IIC
Zone 21, Ex tb IIIC T90°C
-40°C < Tamb. < +60°C; Temperature Code T6
-40°C < Tamb. < +65°C; Temperature Code T5
Enclosure Type 4X & IP66
- ATEX Certificate # Sira 12ATEX1182
 II 2 G D
Ex d IIC T* Gb
Ex tb IIIC T90°C Db IP68
Ta = -40°C to + *°C
*T6 = -40°C to +60°C
*T5 = -40°C to +65°C
- IECEx Certificate # IECEx SIR 12.0073
Ex d IIC T* Gb
Ex tb IIIC T90°C Db IP68
Ta = -40°C to + *°C
*T6 = -40°C to +60°C
*T5 = -40°C to +65°C

Model Configuration Options

Model Number: DDX -
 A B C



A. Input Power

- A**[▲] 85-265 VAC
- D** 12-24 VDC

B. Analog Output

- 0**[▲] No Analog Output
- 1** 4-20 mA Output

C. Output SPDT Relays

- 0**[▲] No Relays
- 2** 2 Relays
- 4** 4 Relays

Note: [▲]Indicates this option is standard