



Gas Detection Technology

Model PT920 Series 16 Channel Gas Monitor / Controller *Stainless Steel Enclosure*

Features

- Microprocessor based Control modules
- Three (3) Programmable alarm relays
- Sixteen (16) Sensor / Channel Capacity
- RS-485 MODBUS RTU Serial Communication
- PLC and SCADA Compatibility
- Alarm Status LED Indicators



Description

Model PT920-16SS is a microprocessor-based modular controller that provides up to sixteen (16) channels of continuous gas detection. The controller is housed in a Nema 4X Stainless Steel enclosure. Each PT920 Series toxic or combustible gas control module can be interfaced with Pem-Tech's gas sensors. The control modules provide digital display and programmable alarm relay contacts.

Low power RISC based microprocessor allows all the alarm levels and control module address programmed via switches on the front panel. The bright LED display indicates the gas concentration. Also features amber and red LED indicators for alarm status. One of the safety features is a flashing digital display when the control module is in alarm bypass mode. The flashing display is an indication to the personnel in the control room about the alarm bypass status.

Each control module has RS-485 MODBUS RTU serial communication compatible with PLC's, SCADA, and DCS systems. The module provides complete status like current gas concentration, sensor calibration and current alarm status. The alarm levels can also be accessed and programmed via MODBUS communication.



Model PT920 Series 16 Channel gas Monitor / Controller

Specifications

Electrical Classification

Nema 4X Stainless Steel Enclosure with clear viewing window.

(Optional Purge kit for pressurized enclosure for use in hazardous locations)

Capacity

Up to 16 PT920 Series Control Modules, toxic or combustibles.

Front Panel Indicators

- 2 Bright LED digital display
- 4 each Alarm LED Indicators: Amber for Low Alarm, Red for High, High-High and fault
- Flashing digital display if module in alarm bypass mode.

Test & Safety Features

Displays programmed alarm levels. Flashing alarm LED indicators upon unit power up to check the integrity of display and LED indicators

Operating Temperature

-40°F to +158°F (-40°C to +70°C)

Operating Humidity

5% to 100% RH, non-condensing

Mechanical Specifications

Height: 19 inches (482 mm)

Width: 16 inches (406 mm)

Depth: 10 inches (254 mm)

Weight 35 Lbs. (16 Kg)

Approvals

Enclosure: Nema 4X UL

Control Modules: ABS Type approved

ABS Rules: 1-1-4/3.7, 4-8-3/tbl 2
4-8-3/1.7

DC Power Consumption

40mA @ 24VDC nominal

90mA max. with active alarm relays.

Alarm Relays

Low, High & High-High alarm relays. Fully programmable zero to full scale range. Latching or non-latching, normally open or normally-closed contacts.

Relay Ratings

SPDT Form "C" type Relay contacts
5 Amps @ 250 VAC or 30 VDC

Auxiliary Alarm Relay Assembly

Four (4) each alarm relay contacts

Each relay rated 10Amps @ 125 VAC / 28 VDC

Peripheral & Interface

- RS-485 MODBUS[®] RTU Compatible with PLC's, SCADA and DCS systems. MODBUS registers defined in the control Module: Gas concentration, current alarm levels and alarm status, sensor calibration mode, Remote alarm Reset and Bypass
- Annunciator model PT750 for remote readout

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