



ISO9001:2000
Certified

Gas Detection Technology

Model PT920 Series Gas Monitor / Controller

Features

- Microprocessor based Control modules
- Three (3) Programmable alarm relays
- Eight (8) Sensor / Channel Capacity
- RS-485 MODBUS RTU Serial Communication
- PLC and SCADA Compatibility
- Alarm Status LED Indicators



Description

Model PT920-8FG is a microprocessor-based modular controller that provides up to eight (8) channels of continuous gas detection. The controller is housed in a Nema 4X weatherproof 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.

The 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 8 Channel gas Monitor / Controller

Specifications

Electrical Classification

Nema 4X Fiberglass Enclosure,
Outdoor weatherproof

Capacity

Up to 8 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: 13.5 inches (343 mm)
Width: 12 inches (305 mm)
Depth: 6.5 inches (165 mm)
Weight 10 Lbs. (4.5 Kg)

Input Power

115/230 VAC . Standard
18-28 VDC (Battery backup systems)

Approvals

Enclosure: CSA & 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 alarm active 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

Pem-Tech, Inc.

12144 Dairy Ashford, Bldg # 2 • Sugar Land, Texas 77478 • USA
Ph: 281-494-2079 Fax: 281-494-2167
www.pem-tech.com Email: sales@pem-tech.com