



FOUR CHANNEL WALL MOUNT CONTROLLER

Gas Detection For Life

Pioneer™ 4W Model



Features:

- Simultaneous readout of all 4 channels
- Three alarm levels per channel
- Discrete and common relays
- NEMA 4X enclosure
- 4-20 mA outputs
- Proven, long-life sensors for a wide variety of gases
- Accepts any 4-20 mA transmitter input (24VDC)
- Easy to install, operate and expand
- CSA / NRTL Certified
- Optional datalogging available

Industry Applications:

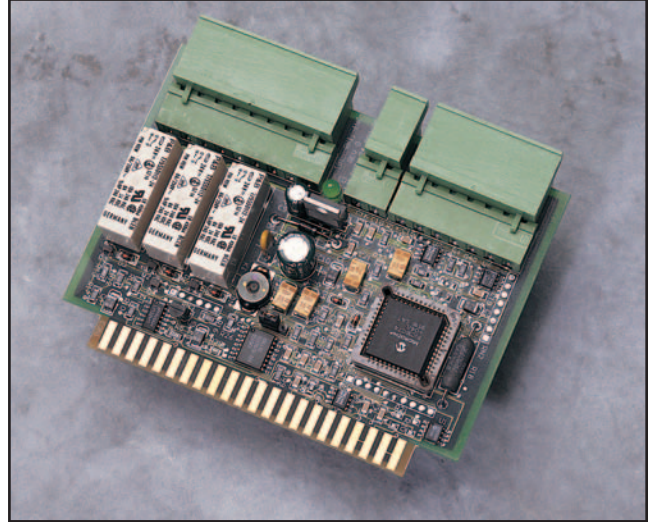
- Petrochemical plants
- Refineries
- Water & wastewater treatment plants
- Pulp & paper mills
- Gas, telephone, & electric utilities
- Parking garages
- Manufacturing facilities
- Steel
- Automotive
- HVAC

The Pioneer is the most versatile and affordable continuous monitor available for gas detection and process control. This feature-packed instrument accepts a wide variety of power inputs and provides numerous output options. RKI also offers the industry's widest selection of high quality gas sensors and transmitters.

The inherent flexibility of the Pioneer affords numerous options for the end user. The Pioneer-4W accepts up to 4 sensor inputs. Each active detection channel includes a universal plug-in analyzer card and a gas sensor / transmitter. Analyzer cards accept any 4-20 mA signal or accept LEL and Oxygen sensors directly. The sensor signals are processed by the Pioneer to activate alarms at 3 preset levels. Both common and discrete alarm relays are standard features. A large display shows readings and status for all four channels simultaneously. Powerful, user friendly software allows easy customization to satisfy almost any application.

The unprecedented features including flexibility, cost effectiveness and easy operation make the Pioneer the smart choice for any monitoring and control application.

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Controller Specifications

Power Requirements: 90 to 132 VAC, 50/60 Hz, 1A max. 180 to 265 VAC, 50/60 Hz, 1/2A max (Optional). 20 to 60 VDC, 50 watts max. 12 VDC input available	Alarm Relays: continued	Relays fully programmable by user, selectable for levels, increasing or decreasing, latching or self reset, normally energized or normally de-energized, with time delay option for alarm on and alarm off.
	Analog Recorder Outputs:	Separate current or voltage outputs for each of four channels; non-isolated, 4 to 20 mA (into 500 ohms maximum) or optionally 0 to 1 VDC (into 200 ohms minimum).
Environmental Operating Temp: 32°F to 122°F (0°C to 50°C)	Audible Alarm:	Enclosure mounted buzzer, 94 db at 1' (30 cm) Coded output Pulsing: Gas alarm Steady: Fail
Storage Temp: -4°F to 158°F (-20°C to 70°C)	Display Panel:	Alphanumeric display with backlighting. Twenty characters per line, four lines total.
Relative Humidity: 5 - 95% RH non-condensing	Status Indication:	Five color coded LEDs; Alarm 1, Alarm 2, Alarm 3, Pilot, and Fail.
Enclosure Rating: NEMA 4X; waterproof, corrosion resistant	Inputs Sensor	Any 4-20 mA transmitter, 24VDC, 2 or 3 wire, 400 mA max standard. LEL or Oxygen sensors directly.
Physical Dimensions: 12.5"H x 11.0"W x 6.4"D (30.5cm x 28cm x 16.3cm)	Operator Controls Internal	Four push buttons inside enclosure for setup and programming.
Weight: 8 lbs. (3.6 kg)	External	Alarm reset switch.
Enclosure: Wall mounting grey polycarbonate with red overlay	Warranty	One year materials and workmanship.
Conduit Connection: 3/4" NPT conduit hubs, four provided		
Wire Terminations: Screw type terminal block/12 gauge max.		
Outputs Alarm Relays: Three relays per channel (Alarm 1, Alarm 2, Alarm 3, or Fail) Four common relays (Alarm 1, Alarm 2, Alarm 3 and Fail) Single pole, double throw (SPDT) isolated contacts Rated - 250 VAC to 8A resistive		

Gas Detection Channels

Gas	Standard Range
Ammonia (NH ₃)	0 - 75 PPM
Arsine (AsH ₃)	0 - 0.20 PPM
Boron Trichloride (BCl ₃)	0 - 5.0 PPM
Carbon Dioxide (CO ₂)	0 - 1.0% Vol
Carbon Monoxide (CO)	0 - 300 PPM
Carbon Tetrachloride (CCl ₄)	0 - 30 PPM
Chlorine (Cl ₂)	0 - 3.00 PPM
Chlorine Trifluoride (ClF ₃)	0 - 1.0 PPM
Combustibles	0 - 100% LEL
Diborane (B ₂ H ₆)	0 - 0.3 PPM
Fluorine (F ₂)	0 - 3.00 PPM
Hydrocarbons	0 - 500 PPM
Hydrogen Chloride (HCl)	0 - 15.0 PPM
Hydrogen Fluoride (HF)	0 - 9.0 PPM
Hydrogen Sulfide (H ₂ S)	0 - 100 PPM
Hydrogen Sulfide (H ₂ S)	0 - 30.0 PPM
Hydrogen Sulfide (H ₂ S)	0 - 1.00 PPM
Nitric Oxide (NO)	0 - 100 PPM
Nitrogen Dioxide (NO ₂)	0 - 15.0 PPM
Nitrogen Trifluoride (NF ₃)	0 - 30.0 PPM
Oxygen (O ₂)	0 - 25.0% Vol
Ozone (O ₃)	0 - 1.0/5.0 PPM
Phosphine (PH ₃)	0 - 1.00 PPM
Silane (SiH ₄)	0 - 15.0 PPM
Sulfur Dioxide (SO ₂)	0 - 30 PPM
TEOS (Si(OC ₂ H ₅) ₄)	0 - 15 PPM
Tungsten Hexafluoride (WF ₆)	0 - 9 PPM



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