Submittal Data Sheet

Features

The Powerex Area Alarm Panel digitally displays gas pressure (0.5 psi increments) and monitors and displays normal and alarm conditions for up to 14 medical gases. Transducers are included and may be mounted in the alarm back box or remotely.

- ETL listed to UL-1069 and CSA-C22.2 No. 205.
- Complies with NFPA 99.
- Made in the USA.
- Self-contained unit - Designed for ease of installation and service.
- Microprocessor controlled.
- Self-diagnostic (test button) and error message display for ease of maintenance.
- Audio and visual alarm indicators.
- Bright easy to read L.E.D. displays – clearly visible in both day and night lighting conditions.
- Constant display and monitoring of each gas.
- User programmable high/low set points.
- Dry contacts for remote monitoring of all alarm conditions on each gas module and on the CPU module for the entire panel.
- Alarm history display of previous alarm conditions.
- Easy to read – color coded gas modules.
- Hinged frame with lanyards for easy accessibility.
- Optional interface to the hospital TNET alarm information management system (area & master information).
- Three year PC board warranty.

Specification

The alarm shall be the Powerex Area Alarm Panel. The panel shall be microprocessor controlled and designed to comply with NFPA 99. The panel shall be 100% digital and shall not require re-calibration. The alarm panel shall be enclosed in a steel box and shall be designed to accept an electrical input range of 120-240 volts AC – 50-60 hertz. The source voltage shall be stepped down with a self-contained transformer. The panel shall contain audible and visual alarm indicators. The audible alarm may be silenced by pressing the alarm silence button, but the visual alarm indicator can only be cancelled by fault correction. The alarm shall detect and filter out transient (less than 0.6 seconds) signals created by R.F.I. The alarm shall be capable of displaying alarm history for all possible alarm conditions.

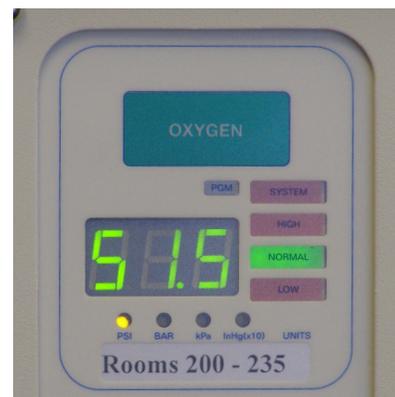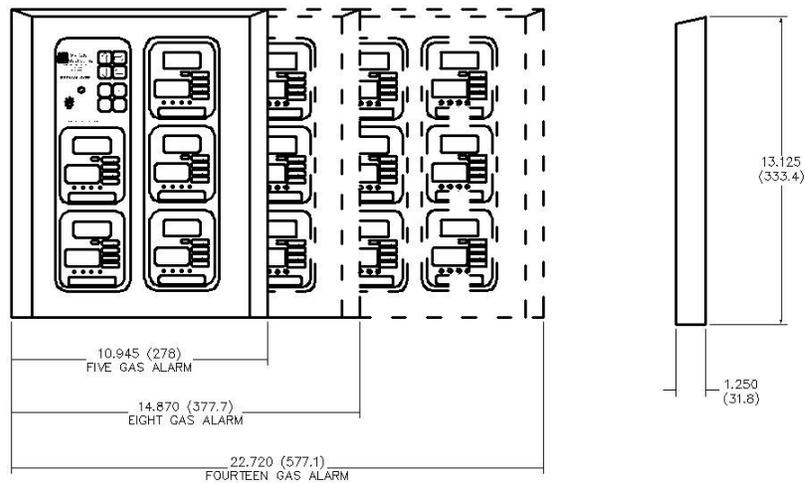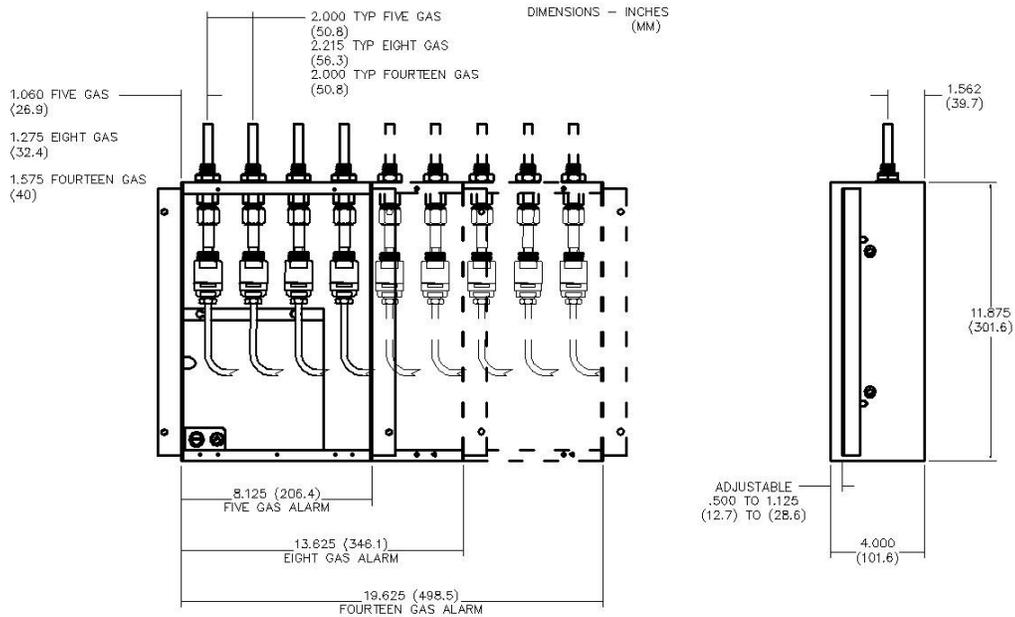Each vertical slot shall display up to three gases. The

Area alarm shown is 3 gases – part #PX-DUXXOVA

alarm shall be capable of monitoring and displaying up to 14 gases per alarm panel. Gas modules can be arranged in accordance with the customer's requirements.
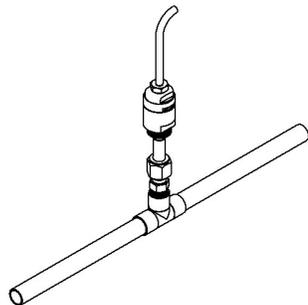
In addition, each Area Alarm Module shall incorporate the following features:

- Does not require re-calibration.
- Gas specific sensor with DISS nut & nipple. An error message will be displayed if incorrect sensor or no sensor is attached.
- User programmable pressure limits (Programmed from factory at 60/40 psig and 12 in Hg).
- Shall be capable of displaying gas readouts in PSI (in Hg), BAR or kPa, button selected.
- Gas alarm repeat feature factory set at 10 minutes, adjustable from 1 minute to 999 minutes, or off.
- Digital Transducers to be mounted inside the alarm for easy access, or may be mounted remotely up to 5,000 ft (1,524 m) utilizing twisted pair wiring.
- Gas specific DISS risers with serviceable Frontall™ (front end loaded) cartridge demand check valve.

DIMENSIONS — INCHES
(MM)

2.000 TYP FIVE GAS
(50.8)
2.215 TYP EIGHT GAS
(56.3)
2.000 TYP FOURTEEN GAS
(50.8)

1.060 FIVE GAS
(26.9)

1.275 EIGHT GAS
(32.4)

1.575 FOURTEEN GAS
(40)

1.562
(39.7)

11.875
(301.6)

ADJUSTABLE
.500 TO 1.125
(12.7) TO (28.6)

4.000
(101.6)

8.125 (206.4)
FIVE GAS ALARM

13.625 (346.1)
EIGHT GAS ALARM

19.625 (498.5)
FOURTEEN GAS ALARM

13.125
(333.4)

10.945 (278)
FIVE GAS ALARM

14.870 (377.7)
EIGHT GAS ALARM

22.720 (577.1)
FOURTEEN GAS ALARM
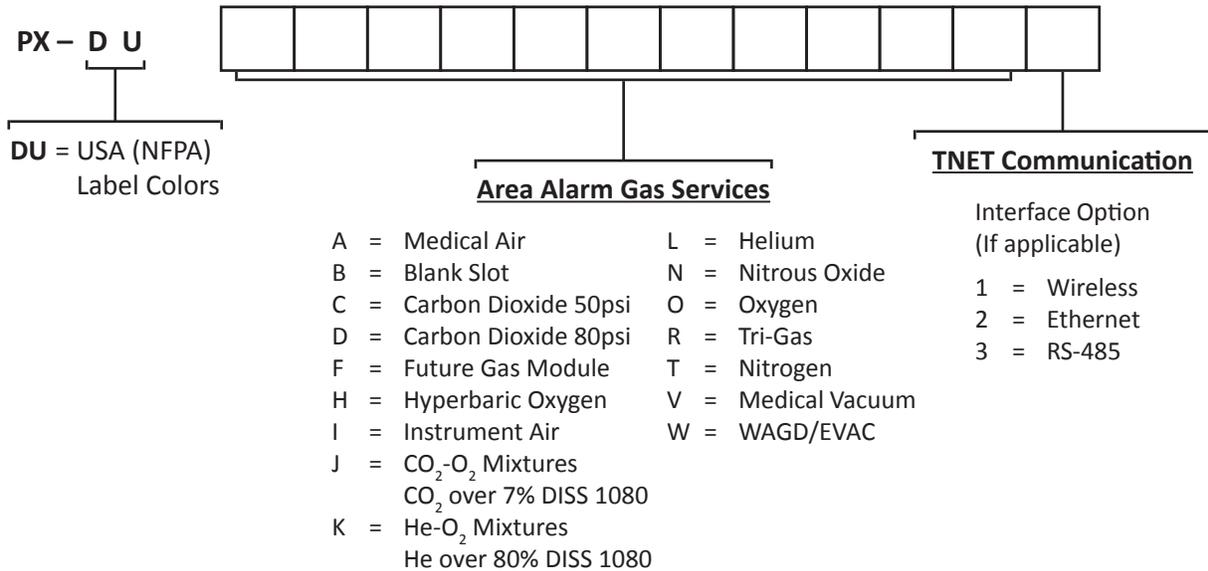
1.250
(31.8)

Typical Methods of Remotely Mounting Transducers

On piping using a "Tee" and Gas
Specific Demand Valve
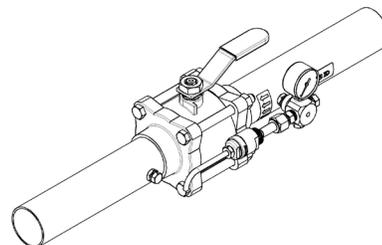
On Zone Valve using EZ Find
Valves or Retro Fit Kits

Ordering Information

```
PX – D U  [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]
```

DU = USA (NFPA)
Label Colors

Area Alarm Gas Services

A	= Medical Air	L	= Helium
B	= Blank Slot	N	= Nitrous Oxide
C	= Carbon Dioxide 50psi	O	= Oxygen
D	= Carbon Dioxide 80psi	R	= Tri-Gas
F	= Future Gas Module	T	= Nitrogen
H	= Hyperbaric Oxygen	V	= Medical Vacuum
I	= Instrument Air	W	= WAGD/EVAC
J	= CO_2-O_2 Mixtures		
	CO_2 over 7% DISS 1080		
K	= He-O_2 Mixtures		
	He over 80% DISS 1080		

TNET Communication

Interface Option
(If applicable)

1 = Wireless
2 = Ethernet
3 = RS-485

Note: Contact Customer Service for gases not listed above.

Medical Gas Area Alarms come in one of three configurations shown below – 2 slots, 3 slots, or 5 slots.

2 Slot Boxes can accommodate up to 5 gases
PX-DUOFB = 1 Gas Area Alarm – Oxygen, Future Gas Module, Blank slot, NFPA colors, 2 slot box
PX-DUXXOVA = 3 Gas Area Alarm – Blank Position, Blank Position, Oxygen, Medical Vacuum, Medical Air, NFPA colors, 2 slot box
PX-DUOVANT2 = 5 Gas Area Alarm – Oxygen, Medical Vacuum, Medical Air, Nitrous Oxide, Nitrogen, NFPA colors, 2 slot box with optional ethernet communication interface to TNET

3 Slot Boxes can accommodate up to 8 gases
PX-DUOVANTB = 5 Gas Area Alarm – Oxygen, Medical Vacuum, Medical Air, Nitrous Oxide, Nitrogen, Blank slot, NFPA colors, 3 slot box
PX-DUXXOVANTC = 6 Gas Area Alarm – Oxygen, Medical Vacuum, Medical Air, Nitrous Oxide, Nitrogen, Carbon Dioxide, NFPA colors, 3 slot box
PX-DUOVANTCWRI = 8 Gas Area Alarm – Oxygen, Medical Vacuum, Medical Air, Nitrous Oxide, Nitrogen, Carbon Dioxide, WAGD, Tri-Gas, NFPA colors, 3 slot box with optional wireless communication interface to TNET

5 Slot Boxes can accommodate up to 14 gases
PX-DUXXOVANTCBB = 6 Gas Area Alarm – Blank Position, Blank Position, Oxygen, Medical Vacuum, Medical Air, Nitrous Oxide, Nitrogen, Carbon Dioxide, Blank slot, Blank slot, NFPA Colors, 5 slot box
PX-DUXXOVANTCWIFB = 8 Gas Area Alarm – Blank Position, Blank Position, Oxygen, Medical Vacuum, Medical Air, Nitrous Oxide, Nitrogen, Carbon Dioxide, WAGD, Instrument Air, Future Gas Module, Blank slot, NFPA colors, 5 slot box
PX-DUOOVVAAHNTCWILR = 14 Gas Area Alarm – Oxygen, Oxygen, Medical Vacuum, Medical Vacuum, Medical Air, Medical Air, Hyperbaric Oxygen, Nitrous Oxide, Nitrogen, Carbon Dioxide, WAGD, Instrument Air, Helium, Tri-Gas, NFPA colors, 5 slot box

See next page for standard alarm configuration example drawings

Ordering Information

—— 1st slot options ——
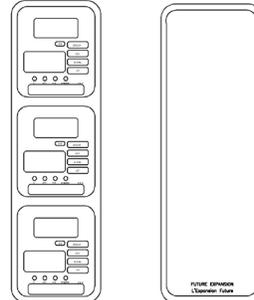
—— 2nd, 3rd, 4th, and 5th slot options ——
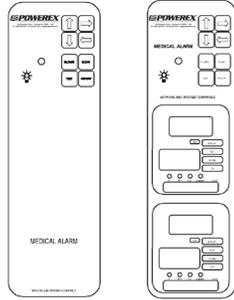
Keypad Button Board with Buzzer and 2 Blank Positions

Model Number begins with PX-DUXX

Keypad Button Board with Buzzer and 2 Gas Module Positions
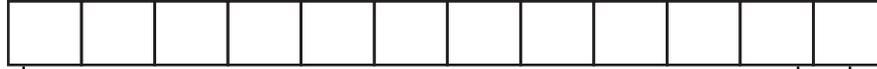
Choose 2 gases from chart below

3 Gas Module Positions

Choose 3 gases from chart below

Blank Slot

Use "B" in model number

PX – **D U**

DU = USA (NFPA) Label Colors

Area Alarm Gas Services

A	=	Medical Air	L	=	Helium
B	=	Blank Slot	N	=	Nitrous Oxide
C	=	Carbon Dioxide 50psi	O	=	Oxygen
D	=	Carbon Dioxide 80psi	R	=	Tri-Gas
F	=	Future Gas Module	T	=	Nitrogen
H	=	Hyperbaric Oxygen	V	=	Medical Vacuum
I	=	Instrument Air	W	=	WAGD/EVAC
J	=	CO_2-O_2 Mixtures CO_2 over 7% DISS 1080			
K	=	He-O_2 Mixtures He over 80% DISS 1080			

Note: Contact Customer Service for gases not listed above.

TNET Communication

Interface Option (If applicable)

1 = Wireless
2 = Ethernet
3 = RS-485