Submittal Data Sheet

Features

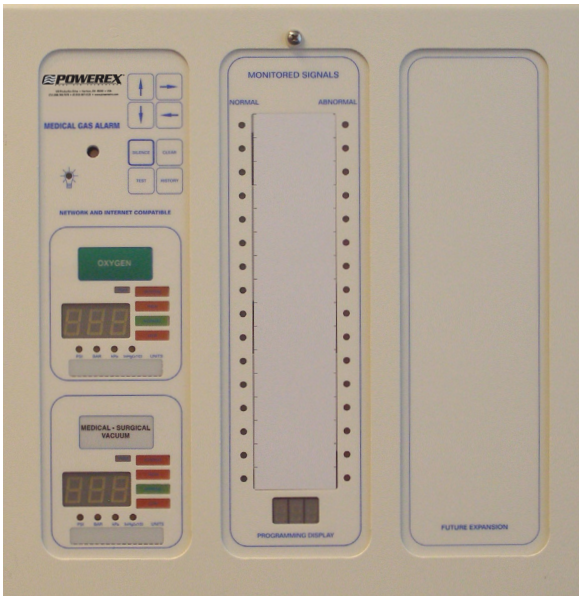
The Powerex Area/Master Alarm Panel monitors and displays normal and alarm conditions for up to 14 medical gases or up to 64 remote medical gas source signals in various combinations. Transducers are included. Pressure switches and DISS union check valve connectors are sold separately.

- Complies with NFPA 99. Made in the USA.
- Designed for ease of installation and service.
- Microprocessor controlled.
- Self-diagnostic 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 and remote signal alarm points (NC, NO or OFF).
- 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 circuit board available for interface to building management system (master alarm signals only).
- Optional interface to the hospital TNET alarm information management system (area & master information).
- Three year PC board warranty.

Specification

The Area, Master or Combination alarm shall be the Powerex Area, Master or Combination 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 gas module shall display up to three gases. Each source signal module shall monitor 16 signals. The alarm shall be capable of monitoring and displaying up to 14 gases per alarm panel , or 64 medical gas source signals, or any combination in increments of up to three gases, or 16 source signals. The alarm may be an Area Alarm, Master Alarm or combination Area/Master. Gas or source signal modules can be arranged in accordance with the customer's requirements.



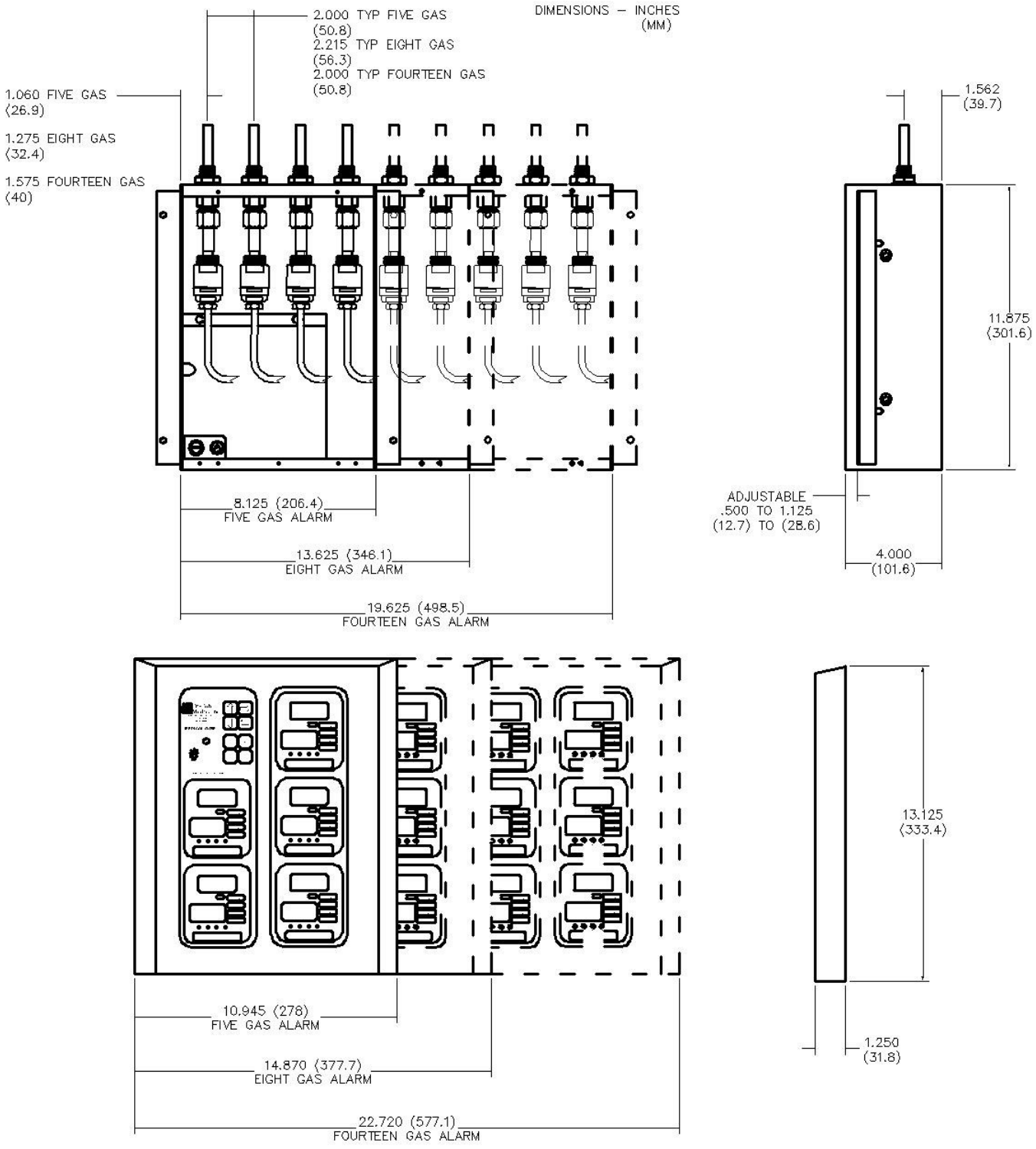
Combination alarm panel shown is a 2-gas Area Alarm with a 16 signal Master Alarm, with a blank module – part # PX-DUOV16B.

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.

In addition, each 16 signal Master Alarm Module shall incorporate the following features:

- User programmable to accept NO or NC signals, or not to be used at this time (disabled). Factory preset to accept Normally Closed signals.
- Each signal point may be individually programmed, NC or NO or turned off (disabled).
- LED indicators (Green) confirms normal status, (Red) indicates abnormal condition.
- Each signal easily labeled and positioned to suit any requirement using self-adhesive labels provided.


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)
8.125 (206.4)
FIVE GAS ALARM
13.625 (346.1)
EIGHT GAS ALARM
19.625 (498.5)
FOURTEEN GAS ALARM
1.562
(39.7)
11.875
(301.6)
ADJUSTABLE
.500 TO 1.125
(12.7) TO (28.6)
4.000
(101.6)
10.945 (278)
FIVE GAS ALARM
14.870 (377.7)
EIGHT GAS ALARM
22.720 (577.1)
FOURTEEN GAS ALARM
13.125
(333.4)
1.250
(31.8)

Ordering Information

PX – D | | | | | | | | | | | | | |

Label Colors
U = USA
C = Canada

Area Alarm Gas Services
O = Oxygen
V = Medical Vacuum
A = Medical Air
N = Nitrous Oxide
T = Nitrogen
C = Carbon Dioxide
W = WAGD/EVAC
S = AGSS
H = Hyperbaric Oxygen
U = Utility Air
L = Helium
I = Instrument Air (USA)
Surgical Air (Canada)
D = Carbon Dioxide 80psig
M = Gas Mixtures 50psig
P = Gas Mixtures high pressure 180psig
R = Tri-Gas
F = Future Gas

Master Remote Signals
16 = 16 points
32 = 32 points
48 = 48 points
64 = 64 points

Blank Slot for Future Expansion
B = Blank Slot

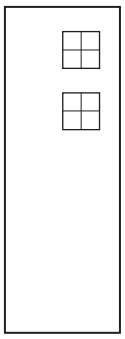
Examples

	PX-DU16 = 16 signal Master Alarm, USA colors, 2 slot box
	PX-DUOVB = 2 gas Area Alarm – Oxygen, Medical Vacuum, Blank slot, USA colors, 2 slot box
	PX-DUOFB = 1 gas Area Alarm – Oxygen, Future Gas, Blank slot, USA colors, 2 slot box
	PX-DUOVANT = 5 Gas Area Alarm – Oxygen, Medical Vacuum, Medical Air, Nitrous Oxide, Nitrogen, Blank slot, USA colors, 2 slot box
	PX-DCOV16B = 2 Gas Area Alarm – Oxygen, Medical Vacuum, 16 signal Master Alarm, Blank slot, USA colors, 3 slot box
	PX-DU32 = 32 signal Master Alarm, USA colors, 3 slot box
	PX-DUOVANTB = 5 Gas Area Alarm – Oxygen, Medical Vacuum, Medical Air, Nitrous Oxide, Nitrogen, Blank slot, USA colors, 3 slot box
	PX-DUOVANTCWMB = 8 Gas Area Alarm – Oxygen, Medical Vacuum, Medical Air, Nitrous Oxide, Nitrogen, Carbon Dioxide, WAGD, Gas Mixture, Blank slot, USA colors, 3 slot box
	PX-DU64 = 64 signal Master Alarm, USA colors, 5 slot box
	PX-DUOVAB32 = 3 Gas Area Alarm – Oxygen, Medical Vacuum, Medical Air, Blank slot, 32 signal Master Alarm, USA colors, 5 slot box
	PX-DUOVANTCTWU32 = 8 Gas Area Alarm – Oxygen, Medical Vacuum, Medical Air, Nitrous Oxide, Nitrogen, Carbon Dioxide, WAGD, Utility Air, 32 signal Master Alarm, USA colors, 5 slot box

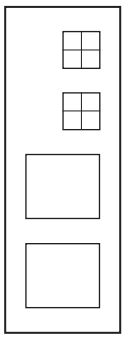
*Note – Medical Gas Alarms come in one of the three configurations shown above - 2 slots, 3 slots, or 5 slots.

See next page for standard alarm configuration example drawings

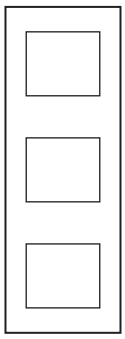
Ordering Information



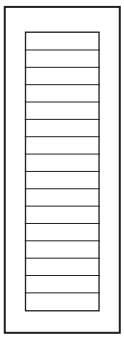
Logic Module with Buzzer



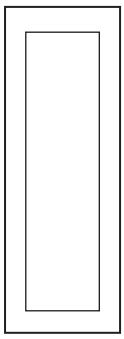
Logic Module with Buzzer & 2 Gas (Area Alarm Modules)



Area Alarm Module (Choose 3 letters from chart below – one for each gas service)



Master Alarm Module 16 Signals per Module



Blank Module

Part Number

PX-DU = USA (NFPA)
PX-DC = Canada (NFPA)

Area Alarm Gas Services

A = Medical Air
C = Carbon Dioxide
E = EVAC/WAGD
F = Future
H = Hyperbaric Oxygen
N = Nitrous Oxide
O = Oxygen
T = Nitrogen
U = Utility Air
V = Medical Vacuum

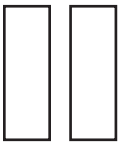
Part Number

16 = One 16-signal module
32 = Two 16-signal modules
48 = Three 16-signal modules
64 = Four 16-signal modules

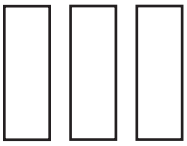
Part Number

B = Blank Module

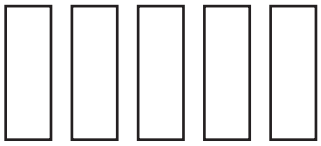
Examples



PX-DU16 = 16 signal Master Alarm
PX-DUOVB = 2 gas Area Alarm – Oxygen, Medical Vacuum, Blank slot
PX-DUOFB = 1 gas Area Alarm – Oxygen, Future, Blank slot



PX-DUOV16B = 2 Gas Area Alarm – Oxygen, Medical Vacuum, 16 signal Master Alarm, Blank slot
PX-DU32 = 32 signal Master Alarm
PX-DUOVANTB = 5 Gas Area Alarm – Oxygen, Medical Vacuum, Medical Air, Nitrous Oxide, Nitrogen, Blank slot



PX-DU64 = 64 signal Master Alarm, USA colors, 5 slot box
PX-DUOVAB32 = 3 Gas Area Alarm – Oxygen, Medical Vacuum, Medical Air, Blank slot, 32 signal Master Alarm
PX-DUOVANCTEU32 = 8 Gas Area Alarm – Oxygen, Medical Vacuum, Medical Air, Nitrous Oxide, Nitrogen, Carbon Dioxide, EVAC, Utility Air, 32 signal Master Alarm