Tri-Tech Medical Inc.

Medical Gas Alarms
Area Alarm Panels

Submittal Data Sheet

Project Information

Project Number_____ Approval_____

Features

The Tri-Tech 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.

- Complies with NFPA 99. Made in the U.S.A.
- Self-contained unit - 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
- 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

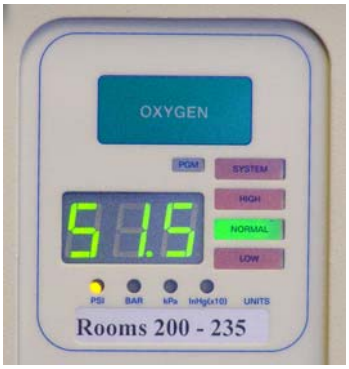
The alarm shall be the Tri-Tech Medical Area Alarm Panel. The panel shall be microprocessor controlled and designed to comply with NFPA 99. The panel shall be 100% digital and shall not require re-calibration. The alarm panel shall be enclosed in a steel box and shall be designed to accept an electrical 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.

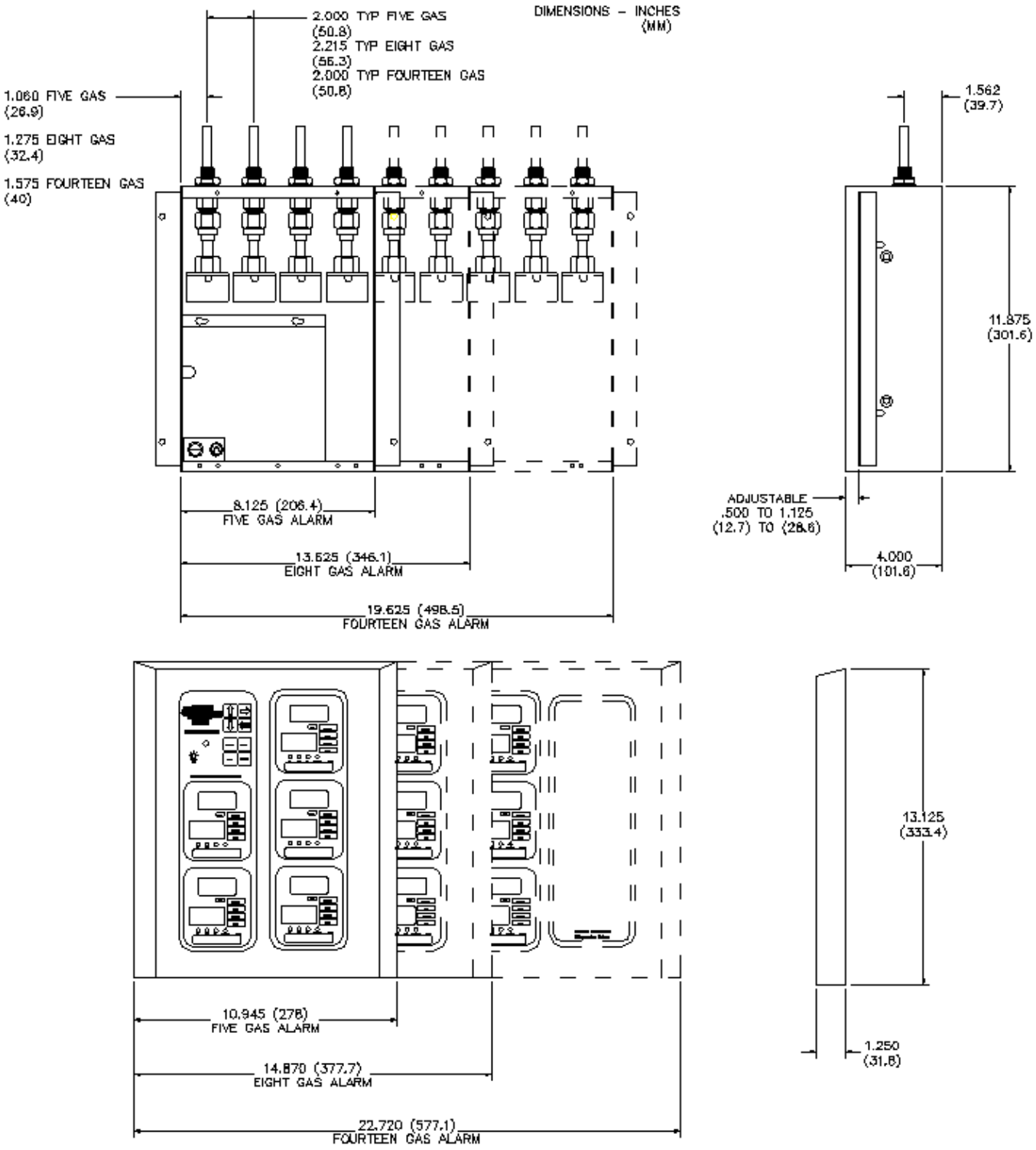
Each vertical slot shall display up to three gases. The alarm shall be capable of monitoring and displaying up to 14 gases per alarm panel. Gas modules can be arranged in accordance with the customer's requirements.

(Area alarm shown is 3 gases – part # DUOAV)

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)
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)

Tri-Tech Medical Inc.

Medical Gas Alarm System

Ordering Information:

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Label Colors	Area Alarm Gas Services	|Master Remote Signals	Blank Slot for Future Expansion
U = USA (NFPA) C = Canada (CSA)	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 80 psig M = Gas Mixtures 50 psig P = Gas Mixtures high pressure 180 psig R = Tri-Gas F = Future	16 = 16 points 32 = 32 points 48 = 48 points 64 = 64 points	B = Blank Slot

Examples:

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DU16 = 16 signal Master Alarm, USA colors, 2 slot box
DUOVB = 2 gas Area Alarm – Oxygen, Vacuum and Blank slot, USA colors, 2 slot box
DUOFB = 1 gas Area Alarm – Oxygen, Future and Blank slot, USA colors, 2 slot box
DUOVANT = 5 gas Area – OXY, VAC, AIR, N2O, N2 and Blank slot, USA colors, 2 slot box

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DCOV16B = 2 gas Area – OXY, VAC & 16 signal Master & Blank slot, USA colors, 3 slot box
DU32 = 32 signal Master Alarm, USA colors, 3 slot box
DUOVANTB = 5 gas Area – OXY, VAC, AIR, N2O, N2 and Blank slot, USA colors, 3 slot box
DUOVANTCWMB = 8 gas Area, OXY, VAC, AIR, N2O, N2, CO2, WAGD, Gas Mixture and Blank slot, USA colors, 3 slot box

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DU64 = 64 signal Master, USA colors, 5 slot box
DUOVAB32 = 3 gas Area – OXY, VAC, AIR, Blank slot & 32 signal Master, USA colors, 5 box
DUOVANCTWU32 = 8 gas Area – OXY, VAC, AIR, N2O, CO2, N2, WAGD, Utility Air & 32 signal Master, 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

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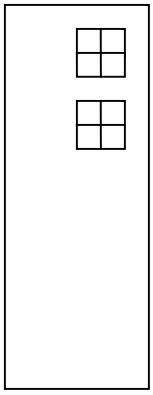
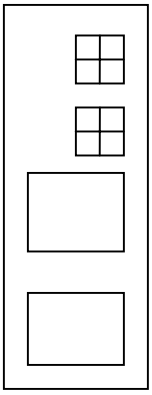
Medical Gas Alarm System

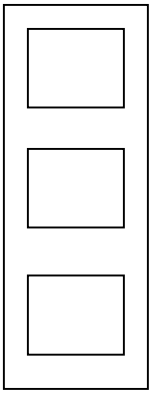
Ordering Information:



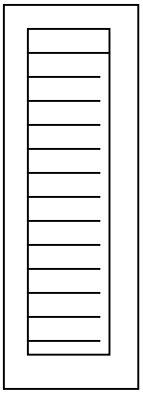
Logic Module With Buzzer



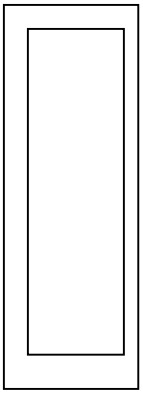
Logic Module With Buzzer & Two Gas (Area Alarm Modules)



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



Master Alarm Module 16 Signals per module



Blank Module

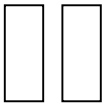
Part Number
DU = USA (NFPA)
DC = Canada (CSA)

Part Number
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 = 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:



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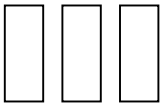
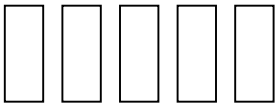


DUOV16B = 2 gas Area Alarm – OXY, VAC & 16 signal Master Alarm and Blank Module
DU32 = 32 signal Master Alarm
DUOVANTB = 5 gas Area Alarm – Oxygen, Vacuum, Air, Nitrous Oxide, Nitrogen and Blank Module



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