

OPTIO IS



- ✓ **Monitors up to 6 gases simultaneously**
 - 3 NDIR sensors (CH₄ and CO₂)
 - 3 PnP (Plug-and-Play) sensors that are preconfigured and pre-calibrated
- ✓ **6 Relays controlled by alarm combinations**
- ✓ **2 Analog outputs (4-20mA/0-2V)**
- ✓ **Modbus RTU over Wireless Network**
- ✓ **Remote control graphical menu setup**
- ✓ **Ultra-Low Power (up to 1 year)**

PROVEN GAS DETECTION & MONITORING

CONSPEC CONTROLS LTD.
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Burlington, Ontario L7N 3J5
1-416-661-0500

CONSPEC CONTROLS INC.
6 Guttman Blvd.
Charleroi, PA 15022
1-724-489-8450

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ISO 9001:2008
10011242 QM08



Technical Specifications

SENSORS

- 3 Plug-and-Play Electrochemical sensors
 - Factory preconfigured and calibrated
 - CO, O₂, NO₂, NO, H₂S, and more
- 3 NDIR sensors
 - CH₄, CO₂, and more
- Sensor extension up to 100ft (30m)

ALARMS

- 4 Custom Alarm Levels with hysteresis and hold-to-alarm times
- Sensor Fail-High and Fail-Low alarms
- Ability to associate relay outputs with alarm levels from a single sensor, or multiple sensors using logical "AND/OR"

IO CAPABILITIES

- 6 Relays (Not Intrinsically Safe)
- 2 channels 4-20mA outputs
- Horn/Strobe configurable control

COMMUNICATION INTERFACES

- RS485, TRUNK, Wireless
- Modbus RTU (wired or wireless)
- Com Distance up to 6Km (3.75miles)

MENU & DISPLAY

- Intuitive menu using graphical LCD
- Password protected (user or admin)
- Real-time readings of multiple sensors
- RGB backlight indicates monitor status

CONFIGURATION

- Using IR remote with local LCD menu
- Via Modbus register map or wireless

USER INTERFACE

- IR remote control
- Simple 4 Button Keypad

INPUT POWER OPTIONS (Intrinsically Safe)

- 6-18 VDC (IECEX/ATEX)
- 6-15 VDC (MSHA)
- Battery Power (wireless operation)

POWER CONSUMPTION

- 2mA @ 15VDC (up to 6 EC Sensors and 10% Backlight)
- Monitor goes into various sleep modes when battery powered

TEMPERATURE & HUMIDITY RANGE

- -20 to +45°C, 0-99% RH non-condensing
- Condensation recovery algorithm for NDIR CH₄ sensors

WIRELESS FEATURES

- Up to 1 year battery life
- Up to 2 miles (over-ground)
- Up to 0.5 miles (underground)
- License free 915MHz band
- Seamless Modbus RTU over Wireless
- Self-healing and Self-forming Network
- Up to 250 Gateways each supporting up to 32 wireless multi-gas monitors

WARRANTY

- Two years standard warranty

APPROVALS

- **IECEX:** Ex ia I Ma, Ex ia IIA T4 Ga, Ex ia IIIC T135°C Da
- **ATEX:** Ex I M1 Ex ia I Ma, Ex II 1 G Ex ia IIA T4 Ga, Ex II 1 D Ex ia IIIC T135°C Da,
- **North America:** (Gas) Class I, Division 1, Group D, T4, Class I, Zone 0, AEx ia IIA T4 Ga, Ex ia IIA T4 Ga, (Dust) Class II, Division 1, Groups E-G, T4 and Class III, T135°C, Class I, Zone 20, AEx ia IIIC T135°C Ga, Ex ia IIIC T135°C Da
- **MSHA**