

OPTIO_G



- ✓ 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
- ✓ Graphical Menu Setup
- ✓ Low Power

PROVEN GAS DETECTION & MONITORING

CONSPEC CONTROLS LTD.

3390 S Service Rd
Burlington, Ontario L7N 3J5
1-416-661-0500

CONSPEC CONTROLS INC.

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

sales.usa@conspec-controls.com
www.conspec-controls.com

Technical Specifications

Sensors (Capable of up to 6 total)

- 3 Plug and Play Electrochemical Sensors
 - Preconfigured & Pre-calibrated
 - O₂, CO, NO₂, NO, H₂S, and more
- 3 NDIR (Non-Dispersive Infrared) Sensors
 - CH₄, CO₂, and more
- Air Velocity Sensor
- Mini Weather Station
 - Dry & Wet Bulb Temperature
 - Barometric Pressure
 - Humidity

Alarms

- 4 Custom Alarm Levels with Hysteresis and Hold-to-Alarm Times
- Sensor Fail-Low and Fail-High Alarm
- 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 Analog Outputs
- Horn/Strobe Configurable Control

Communication Options

- Conspec Legacy Communications Protocol
- MODBUS TCP, MODBUS RTU
- 4-20mA Analog Output

Communication Interfaces

Wired

- Conspec P1209 Trunk
- RS-485 Cable
- RS-232 Cable
- Ethernet Cable
- Power Over Ethernet Cable

Wireless

- Conspec 900Mhz Wireless (Americas, Australia, Africa)
- Conspec 800Mhz Wireless (Europe, Africa, Asia)
- VHF for Leaky Feeder
 - 145-160Mhz Downstream, 170-185Mhz Upstream
- 2.6 Ghz Wifi
- LTE

Input Power Options

- MSHA Certified Intrinsically Safe for Use in Coal Mines
 - 6-15VDC *See note

Non-Intrinsically Safe:

- 6-24VDC
- Power over Ethernet (POE)
- Battery Powered Wireless (not available for Wifi)

Power Consumption

- 2mA @ 15VDC (up to 6 EC Sensors & 10% Backlight)
- Monitor Goes Into Various Sleep Modes When Battery Powered

Temperature & Humidity Range

- 20° C to +45° C RH Non-Condensing
- Condensation Recovery Algorithm for NDIR CH₄ Sensors

Wireless Features

- Up to 1 Year Battery Life
- Up to 2 Miles Range (above ground)
- License Free 915Mhz Band
- Seamless MODBUS RTU over Wireless
- Gateway Can Support up to 32 Wireless Multigas Detectors

Warranty

- One Year Standard Warranty

Approvals

Current

- MSHA Sensor Classification G Issue Number 129

Pending

- 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 111 G Ex ia IIA T4 Ga, Ex 111 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

NOTE

- *Only When Powered by a Conspec MSHA Certified Blue Outstation using Conspec MSHA Certified P1209 Cable