



CONSPEC®

INNOVATION THAT DIGGS DEEPER.

OPTIO I



Stand-alone microprocessor based multi-gas detector

The OPTIO I is a stand-alone, microprocessor based multi-gas detector and designed for indoor general purpose areas where there are concerns of toxic gas leaks, bi-product process gases, and oxygen displacement. With optional enclosures the Optio I Transmitter head can handle up to 6 integral or remote sensors (3 NDIR and 3 Electrochemical).

Options are available for dry contact relays with programmable alarm points, (2) 4-20mA outputs, and Modbus communications. The Optio I transmitter head can easily be tied into a plant DCS / SCADA, a control panel, used for equipment shutdown, and or initiate external notification appliances.

Designed to minimize installation time, the OPTIO I mounts to a standard 4"x4" junction box and has ample room for wiring relays, 4-20mA outputs and/or Modbus communications. Factory default settings allow for minimal setup times and provide savings from eliminating confusing configurations.

BENEFITS

- Self Diagnostic
- Onboard Relay Contacts
- Automatic Reset After Power Loss
- Bright LCD Display
- 1 Year Limited Warranty

APPLICATIONS

- General Purpose Industrial
- Chemical Storage
- Battery Charging / Storage
- Factories | Warehouses
- Oxygen Displacement O2
- Toxic Gas Leak Detection
- Manufacturing Facilities

OPTIO™ I
Reliability when every second matters.

INPUT POWER OPTIONS

- 12-24 VDC
- 120VAC 50/60Hz

POWER CONSUMPTION

- Max 50mA @ 24 VDC

TEMPERATURE & HUMIDITY RANGE

- -20 to +50°C
- 15-90% RH non-condensing

IO CAPABILITIES

- 6 digital input/output (0-5.0V)
- 6 relay ports (250VAC-220VDC, 2A) with fail safe or nor mal operation. Can be linked to alarm states or controlled via Modbus.
- 2 channels 4-20mA outputs

COMMUNICATION INTERFACES

- Modbus RTU (RS485)

USER INTERFACE

- IR remote control

CONFIGURATION

- Local menu display via graphical LCD
- Modbus register map

MENU & DISPLAY

- Intuitive menu navigation via LCD
- Password protected (User or Admin)
- Quick review screens show additional diagnosis and monitor setting
- Real-time gas readings on screen
- Dimmable RGB backlight and contrast
backlight color indicates monitor status

ALARMS

- 4 alarms with hysteresis and hold times
- Sensor fail-high and fail-low
- Ability to link alarm states to relays

DETECTABLE GASES

- Carbon Monoxide CO
- Hydrogen Sulfide H₂S
- Oxygen O₂
- Sulfur Dioxide SO₂
- Chlorine CL₂
- Hydrogen H₂
- Carbon Dioxide CO₂
- Nitric Oxide NO
- Nitrogen Dioxide NO₂
- Others - Consult Factory

REPLACEMENT PARTS AND MANUFACTURER PART NUMBERS

- Main board: T1453
- 4-20mA card: T14 79
- Relay card: T1471
- Modbus card: T1469
- Calibration kit: P1879-XX
- IR remote: 911118-CPM