



## Applications

- Mining
- Oil & Gas
- Petrochemical Exploration
- Refineries
- Power/Co-Generation Plants
- Chemical Processing
- Plastics
- Pharmaceutical Labs
- Medical
- Wastewater Treatment Plants
- Water Treatment Facilities
- Pulp & Paper Mills
- Semiconductor Manufacturing
- Glass Manufacturing
- Tank Farms
- Greenhouses
- Industrial Agriculture Facilities
- Food Processing
- Breweries/Wineries/Distilleries
- Manufacturing
- Factories/Warehouses
- Construction
- Telecommunications
- Battery Charging Stations
- Fuel Cell Storage
- Boiler/Generation Rooms
- Automotive Facilities

## Benefits

- Low Power Consumption
- Industry Standard Output Signal (Modbus RTU Protocol)
- Supports Several Gas Sensing Technologies (Infra-red, Photo-ionization, Electrochemical)
- Reduced Signal Noise as the Signal is Digitized at Source
- Temperature Compensated Sensor Readings
- Superior Accuracy in Fault Finding
- Real Time Sensor Cell Analysis with Lifetime Sensor Records
- Preventative Maintenance Condition Monitoring
- Reliable & Stable Operation

The New State of the art **Smart Head Gas Monitoring System** monitors, records, remembers, warns and advises if it needs replacement.

**Conspec's Smart Head Monitor** is smarter than your average monitor, because its digital, yet, there is less complexity with greater reliability.

**Conspec's Smart Head Monitor** communicates over the most widely used protocol: **Modbus RTU**. **Modbus RTU** open protocol is a widely used, rugged and a very secure industrial communications protocol.

**Conspec's Smart Head Monitor** stores all important operating parameters, available from a connection to a local computer, which enables management to plan maintenance rather than respond to a perhaps critical sensor failure, as with monitors which use an analog signal.

## Key Features

- PC Based Software for Remote Configuration
- A Clear & Back-lit LCD Display
- Bright LED Status Indicators
- Long Sensor Life
- Automatic Reset after Power Loss/Interruption
- Temperature & Humidity Compensated
- High Immunity to RFI & EMI
- One Year Limited Warranty

### Available Options

- UP99 Hand-Held IR Programmer/Calibrator
- P1879 Calibration Kits
- P1880 Calibration Gas

### Smart Head Ordering Information (SHMXX – Gas Type)

#### Available Monitors

- SHM01** – Ammonia
- SHM02** – Carbon Dioxide
- SHM03** – Carbon Monoxide
- SHM04** – Chlorine
- SHM05** – Combustibles
- SHM06** – Hydrogen
- SHM07** – Hydrogen Chloride
- SHM08** – Hydrogen Sulfide
- SHM09** – Nitric Oxide
- SHM10** – Nitrogen Dioxide
- SHM11** – Oxygen
- SHM12** – Ozone
- SHM13** – Sulfur Dioxide
- SHM14** – Volatile Organic Compounds

\*\*\*Consult Factory for  
Other Sensors, Gases  
& Ranges\*\*\*

\*\*\*For Multi-Channel Gas  
Detection, contact us  
about our Smart Head  
Controller\*\*\*

## Specifications

### Mechanical

Enclosure: NEMA 4X/IP66 Nylon & Stainless Steel Enclosure

Dimensions: 7.5" x 5" x 3" / 19.1cm x 12.7cm x 7.6cm

Weight: 3 lbs / 1.6 kg

Mounting: Plate Mounted, Holes for Suspension, Grooves for Slot Usage.

Conduit Entry: One (3/4" Cable Grip)

### Environmental

Operating Temperature: 14°F to 120°F (-10°C to 50°C)

Temperature Compensation: Full Temperature Range

Operating Humidity: 10% to 95% RH Non-Condensing

### Electrical

Operating Voltage: 12-24VDC

Cable Requirements: 4-Conductor 18 AWG Suggested

Current Consumption: 50mA Full Scale

Output Signals: Modbus RTU on RS-485 or Conspec Legacy, 4 Open Collector Digital Output, Linear 4-20mA Analog; HART Communication Protocol Optional

### System

Sensor Types: Electrochemical, Infrared, Photo-Ionization

Keypad: 4 Button Keypad or Infrared Remote Control

Modes: Two (Calibration & Normal)

Display: 3.5" (9cm) LCD Display

Status LED's: Green - Power; Red - Alarm; Yellow - Fault; Green - Comm.

Alarm Set Point #1: User Defined

Alarm Set Point #2: User Defined

Alarm Set Point #3: User Defined

Remote Configuration: PC Software

### Sales Representatives



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