



CONSPEC®

INNOVATION THAT DIGS DEEPER.

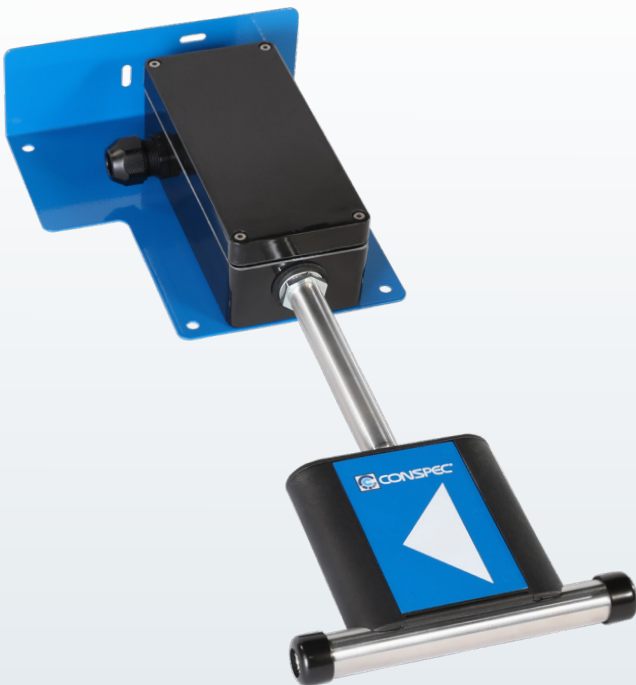
OPTIO AVM

Optio Air Velocity Monitor

For over 50 years, Conspec has pioneered the design, development, and manufacturing of environmental and atmospheric monitoring, process control and safety technology relied upon by mining, industrial, oil & gas, and commercial operations all over the world.

Conspec's NEW Optio Air Velocity Monitor featuring a modified pilot tube using differential pressure technology has been designed to provide the maximum of accuracy and responsiveness while withstanding the harshest environmental and operational conditions. Our Air Velocity Monitors are optimized to provide stable readings in the presence of moving vehicles disrupting air velocity readings. Where other monitors often fail, the Optio AVM flourishes, providing a stable, reliable air velocity reading.

The Optio Air Velocity Monitor has been designed and tested to ensure simple installation, calibration, and maintenance. The innovative design of the Optio AVM combines gas and atmospheric monitoring, I/O support and a wide array of power and communications options to create an all-in-one solution which greatly reduces upfront costs by eliminating the need for multiple devices.



BENEFITS

- Reliable & Stable Operation
- Can be Combined With Other Sensors and I/O Options
- Robust Construction
- Enhanced Alarming Capabilities
- Easy Menu Navigation - Icon Based
- Easy Configuration using Conspec's OASIS Software
- Native Horn/Strobe Support
- New Accurate Differential Pressure Technology

APPLICATIONS

- Air Velocity
- Air Quality Stations
- DIY Ventilation
- Fan Control and Monitoring
- Coal Mining
- Hard Rock Mining
- Tunneling

OPTIO™ AVM
Reliability when every second matters.

SENSORS

- Differential Pressure Sensors in a Modified Pilot Tube
- Operating Ranges:
 - +1000 FPM = +5.0 m/s
 - +1500 FPM = +7.5 m/s
 - +2200 FPM = +11 m/s
 - +3600 FPM = +18 m/s
 - +5000 FPM = +25 m/s

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"

INPUT POWER OPTIONS (NON IS)

- 6-30 VDC
- 100 - 240VAC 50/60Hz
- DC Battery Pack (wireless operation)

INPUT POWER OPTIONS (IS)

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

COMMUNICATION INTERFACES (IS)

- When Connected to an Optio G Monitor (MSHA):
Conspec Trunk, RS-485, Conspec Wireless 900MHz (pending)
- When Connected to an Optio IS Monitor (IECEX/ATEX):
Conspec Trunk, Conspec Wireless 900MHz /800MHz (pending) Band

COMMUNICATION INTERFACES (NON IS)

- When Connected to an Optio Monitor: Conspec Trunk, RS-485, RS-232, Ethernet, POE, Conspec Wireless 900MHz/800MHz (pending) Band, Wi-Fi, LTE, Leaky Feeder (VHF, UHF)
- Com Distance up to 6km (3.75miles)

COMMUNICATION PROTOCOLS

- MODBUS RTU, MODBUS TCP, Conspec Legacy ACCESSOR

CONFIGURATION

- Using IR remote with local LCD menu
- Via MODBUS/Conspec Legacy Accessor Register Map using Conspec OASIS software/Conspec Senturion SCADA

MENU & DISPLAY

- Intuitive menu using graphical LCD
- Password protected (user or admin)
- Quick info screen shows device settings
- Real-time readings of multiple sensors
- Dimmable RGB backlight
- Backlight color indicates monitor status
- Review screens show additional information

USER INTERFACE

- Must be connected to Optio Monitor
- IR remote control
- 4 Local Tactile Buttons
- Conspec OASIS Windows configuration software

DIMENSIONS

- 16.9"x7.1"x2.7" @ 3lbs (AVM Only)

POWER CONSUMPTION

- 4mA @15V with 10% backlight

TEMPERATURE & HUMIDITY RANGE

- -20°C to +40°C, 10-95% RH non-condensing

WARRANTY

- One year standard warranty

APPROVALS

- MSHA: Part 18
- Commonwealth of Pennsylvania Approval No. BOTE 32-19
- ETL-US: Class I, Division 1, Group D / Class I, Zone 0, Group IIA {AEx ia IIA Ga}/ Class II, Division 1, Group E-G / Class II, Zone 20, Group E-G (pending)
- C-ETL: Class I, Division 1, Group D / Class I, Zone 0, Group IIA {Ex ia IIA} //Class II, Division 1, Group E-G / Class II, Zone 20, Group E-G (pending)
- ATEX: I MI Ex ia I Ma/ Ex ia IIA Ga/ Ex ia IIIC Da (pending)
- IECEX: Ex ia I Ma/ Ex ia IIA Ga/ Ex ia IIIC Da (pending)
- T4 / T135°C & T ambient: -20°C to +40°C
- SIL-1 (pending)