

## Fixed VOC Monitors



The VOXI series of fixed transmitters utilize Photo-ionization Detection (PID) technology to monitor Volatile Organic Compounds (VOCs) at resolutions of 1 ppb with the MP812 and 10 ppb with the MP815. A built-in heater prevents condensation of moisture in the transmitter under high-humidity conditions. Innovative designs of the ultraviolet (UV) 10.6 eV lamp and electrometer reduce contamination, producing more accurate and stable readings and extending maintenance intervals. Mobile apps and a Bluetooth controller make on-site configuration, testing, and trouble-shooting easy and handy. The OLED display is visible from a distance even under strong lighting, while data and alarms are continuously sent to a controller wirelessly or via cables. Major applications include VOC emission monitoring around petrochemical plants, manufacturing and processing facilities.

### **Features, Functions and Benefits**

- VOC emissions monitoring
- 450 gas correction factors
- 1 ppb or 10 ppb resolution (separate models)
- Outstanding linearity over full measurement range
- Auto-ranging and auto-zeroing
- Wide temperature range of -40° to +70°C
- Built-in heater to prevent condensation
- OLED display for maximum visibility outdoors
- Mobile App and Bluetooth controller for handy configuration and testing
- 3 Relays and output to alarm strobe or horns
- Lamp glow indicator
- Rugged, explosion-proof housing
- Easy access to clean lamp & sensor
- Innovative PID for performance & long life

## Detector Specifications

|  |   |
|--|---|
| <b>Size</b>                            | 8.4 x 7.1 x 5.0 in (213 x 180 x 127 mm)   |
| <b>Weight</b>                          | 3.3 lbs. (1.5 kg)   |
| <b>Sensor</b>                          | Photo-ionization detector with standard 10.6 eV lamp  |
| <b>Detectable Chemicals</b>            | Volatile Organic Compounds (VOCs): fuels, solvents, paints, fumigants, ammonia, etc.  |
| <b>Calibration</b>                     | Two-point calibration   |
| <b>Response Time (for isobutylene)</b> | $t_{90} \leq 30$ seconds (with standard glass-fiber filter)<br>$t_{90} \leq 5$ seconds (w/o glass-fiber filter)   |
| <b>Temperature</b>                     | -40° to 158°F (-40° to 70°C)  |
| <b>Humidity</b>                        | 0% to 100% Relative humidity  |
| <b>Power</b>                           | <5W; 12-30 VDC supply   |
| <b>Sampling Pump</b>                   | Diaphragm pump $\geq 400$ cc/min when responding chemicals are present. Pump duty cycling to $\geq 130$ cc/min when PID response is below pre-set threshold. Sample from up to 100 ft (30 m).   |
| <b>Display</b>                         | 128x64 OLED:<br><ul style="list-style-type: none"> <li>• Real-time readings (auto-ranging 4 digits)</li> <li>• Gas type</li> <li>• Measurement unit</li> <li>• Pump status</li> <li>• Bluetooth and wireless statuses if available</li> </ul>   |
| <b>Communication</b>                   | Remote controller and Android App   |
| <b>Outputs</b>                         | <ul style="list-style-type: none"> <li>• Analog: 4-20 mA (3 wires)</li> <li>• Digital: RS-485,</li> <li>• CAN or ModBus</li> <li>• 3 relays</li> <li>• 1 port to external strobe and horn</li> </ul>  |
| <b>Alarms</b>                          | OLED flashing, external strobe and horn   |
| <b>Housing</b>                         | Aluminum alloy  |
| <b>Housing Entries</b>                 | 2 Conduit entries $\frac{3}{4}$ " NPT   |
| <b>IP Rating</b>                       | IP-66   |
| <b>EMI/RFI</b>                         | Highly resistant to EMI/RFI<br>Compliant with EMC Directive 2014/30/EU  |
| <b>Safety Certifications</b>           |  Class I, Div. 1, Group ABCD T4 (pending)<br>$-20^{\circ}\text{C} \leq T_{\text{amb}} \leq +50^{\circ}\text{C}$<br> Ex d ia IIC T4 Gb (pending)<br> II 2G Ex d ia IIC T4 Gb (pending)<br> European Conformity |
| <b>Installation</b>                    | Pipe holding, wall mount  |
| <b>Warranty</b>                        | 2 Years including PID sensor, 1 year on lamp  |

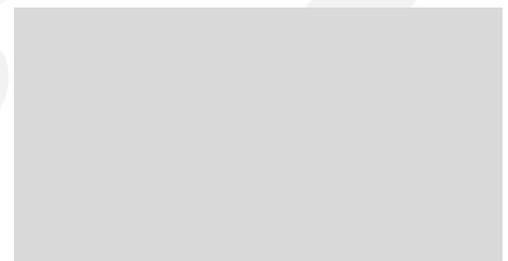
## Model Options

| Model          | VOC Range (ppm)  | Accuracy             | Part No.      |
|----------------|--|----------------------|---------------|
| <b>MP812</b>   | 0.001-200  | $\pm 2\%$ full scale | M008-0001-000 |
| <b>MP815</b>   | 0.01-5,000   | $\pm 5\%$ full scale | M008-0003-000 |
| <b>Options</b> | <ul style="list-style-type: none"> <li>• Intrinsically safe Android phone</li> <li>• Calibration gas &amp; regulator</li> <li>• Filter pack</li> </ul> |                      |               |

## Applications

- Fence-line & Environmental monitoring
- Air Quality control
- Oil, gas & refineries
- Chemical plants
- Manufacturing & processing
- Paints, coatings & adhesives
- Pharmaceuticals & food processing
- Solvent recovery
- Paper pulp and wastewater treatment
- Fumigation

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\* Due to ongoing research and product improvement, specifications are subject to change without notice \*