**SPECIFICATIONS**

All specifications shown apply to both Series 4600 and Series 4600 MB unless otherwise noted.

**Enclosure**
- Transmitter: Copper-free cast aluminum, removable front panel.
- Sensor housing: Stainless steel with a PVC end cap.

**Temperature Range**
- Transmitter: Minus 40°F to 140°F (-40°C to 60°C)
- Sensor: Depends on gas type. See Gas Capabilities Data Sheet.

**Operating Humidity Range**
- Up to 90% RH, non-condensing (up to 95% RH with optional Humishield)

**Operating Pressure Range**
- 0 to 10 psig

**Weight**
- 136g (2.5 lb)

**Power Requirements**
- (4600 2 wire): 14 to 30 V DC, 0.6 W
- (4600MB 3 wire): 18 to 27 V DC, 2.0 W
- (4600MB with relays): 18 to 27 V DC, 4.0 W

**Output**
- Analog: 4 to 20 mA (4600MB)
- RS-485/232 MODBUSRTU (4600MB with relays): 2 alarm, fail (4 SPST rated at 120 V), user-selectable latching/non-latching and energized/deenergized

**Maximum Loop Load**
- (4600 2 wire): 460 ohm at 24 V DC
- (4600MB with relays): 950 ohm at 24 V DC

**Display**
- 3.5 digit LCD; 0 to 100% bargraph; alarm indication; inhibit indication; weak sensor indication.

**Local Inhibit Output**
- Selectable (4600): 3.5 to 20 mA
- (4600MB): 0 to 20 mA

**Self-diagnostics**
- Weak sensor, missing sensor, transmitter fault

**Max. Sensor Separation**
- 50 feet (15.25 m) from transmitter

**Sensor Life**
- 22 to 24 months average, disposable

**Sensor Battery**
- 3 months continuously powered (no drain when powered)

**Sensor Repeatability**
- ±2% full-scale

**Sensor Linearity**
- ±2% full-scale

**Approvals**
- (4600MB): Class 1, Zone 1, Group II, G Ex d II 1 G
- (4600): Class 1, Groups B, C and D, Class 2, Group A, E, F and G, Class 3

**Warranty**
- 1 year (sensor and transmitter). Except Phosgene (COCl₂) sensor - 6 months
**SAFER THROUGH SCIENCE**

The Series 4600 Gas丘® is a toxic gas and oxygen transmitter designed for single and multi-point monitoring applications in rugged, demanding environments. The Series 4600 transmitter is a two-wire device providing a 4-20 mA output and additional output flexibility. Up to 450 transmitter configurations can be accommodated in a multi-wire configuration.

**Advanced Gas Sensors and Universal Electronics**

Gas丘®’s advanced sensor technology is complemented by its robust transmitter electronics to help ensure streamlined operation and facilitate ease of maintenance. With its “sensor-friendly” design, sensor provides data as quick and accurate as possible and validation data to the electronic control of the automatic transmitter configuration. A lithium battery keeps the sensor “live,” eliminating the need for warm-up time and making sure maximum accuracy is maintained. The Series 4600 easily connects pin and makes sensor replacement quick and easy.

The Gas丘® includes a build-in miniature-sensitive sensor to the sensor can be removed without declassifying the area. The sensor connects to the transmitter via an electronic pin, rather than pins or plugs. This patented design makes sensor replacement quick and easy — even with gloves on.

Multiple self-diagnostics and reliability and security. The sensor and transmitter can be removed without declassifying the area. The sensor connects to the transmitter via an electronic pin, rather than pins or plugs. This patented design makes sensor replacement quick and easy — even with gloves on.

**4600MB Additional Features**

- **Integral Sensor with transmitter**
- **No Adaptors**
- **SST No Relays**
- **4600MB (RS-485, 4 to 20 mA) Local Relays N.O.**
- **4600MB (RS-485, 4 to 20 mA) Local Relays N.C.**
- **No Sensor warm-up**
- **Non-intrusive calibration**
- **Sensor end-of-life**
- **Conformally-coated**

**High Performance Sensor Technology**

- **No-Pins® Connector**
- **Integral Battery eliminates sensor warm-up**

**Ordering Options**

- **Sensor Option**
  - **Sensor with rectangular or pin style**
  - **Sensor with rectangular or pin style (not approved for hazardous locations)**
  - **Conformal sensor warm-up, no window included**
- **Sensor with conformal coating or pin style**
- **Sensor with conformal coating or pin style (not approved for hazardous locations)**

- **Ordering Information**
  - **Standard**
    - **(P) 1/4 Turn Rainshield/Splash Guard (typical)**
    - **(P) 1/4 Turn Rainshield/Splash Guard (typical – not approved for hazardous locations)**
    - **(P) High Flow Cell (typical)**
    - **(P) High Flow Cell (typical – not approved for hazardous locations)**
  - **(P) SST Type A (4600MB Only)**
  - **(P) SST Type A (4600MB Only – not available in some models – call for info)**
  - **SST Handheld**

**Features**

- **Easy to Maintain & Operate**
- **Self-Diagnostics**
- **Rugged Design**
- **High Performance**

**Smart Sensor Technology**

Using advanced electrochemical technology, gas sensors such as the RS-485, 4 to 20 mA output is achieved with a true one-man tool. A magnet simply touches to the front panel for non-intrusive operation and calibration.

**4600MB Additional Features**

- **Integral Sensor with transmitter**
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- **No Adaptors**
- **SST No Relays**
- **4600MB (RS-485, 4 to 20 mA) Local Relays N.O.**
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- **4600MB (RS-485, 4 to 20 mA) Local Relays N.O.**
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- **Non-intrusive calibration**
- **Sensor end-of-life**
- **Conformally-coated**

**High Performance Sensor Technology**

- **No-Pins® Connector**
- **Integral Battery eliminates sensor warm-up**

**Ordering Options**

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  - **Sensor with rectangular or pin style**
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  - **Conformal sensor warm-up, no window included**
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- **Ordering Information**
  - **Standard**
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  - **(P) SST Type A (4600MB Only – not available in some models – call for info)**
  - **SST Handheld**
**SPE C I F I C A T I O N S**

All specifications shown apply to both Series 4600 and Series 4600 MB unless otherwise noted.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Enclosure</strong></td>
<td>Transmitter: Copper-free cast aluminum. Sensor housing: Stainless steel with PVC endcap</td>
</tr>
<tr>
<td><strong>Temperature Range</strong></td>
<td>Transmitter: -70°F to 140°F. Sensor: Depends on gas type. See Gas Capabilities Data Sheet.</td>
</tr>
<tr>
<td><strong>Operating Humidity Range</strong></td>
<td>Up to 90% RH, non-condensing up to 95% RH with optional Humidishield</td>
</tr>
<tr>
<td><strong>Operating Pressure Range</strong></td>
<td>0 to 10 psig</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>3 lbs (1.25 kg)</td>
</tr>
<tr>
<td><strong>Power Requirements</strong></td>
<td>(4600 2 wire): 14 to 30 V DC, 0.6 W (4600 MB 3 wire): 18 to 27 V DC, 1.2 W (4600 MB w/ relays): 18 to 27 V DC, 2.0 W</td>
</tr>
<tr>
<td><strong>Output</strong></td>
<td>(4600): 4 to 20 mA, RS-485/232 MODBUS RTU (4600 MB w/ relays): 2 alarm, 1 fail (all 5 A SPST rated at 120 V), user-selectable latching/non-latching and energized/deenergized</td>
</tr>
<tr>
<td><strong>Maximum Loop Load</strong></td>
<td>(4600 2 wire): 460 ohm at 24 V DC (4600 MB w/ relays): 950 ohm at 24 V DC</td>
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<tr>
<td><strong>Display</strong></td>
<td>3.5 digit LCD, 0 to 100% bargraph; alarm indication; inhibit indication; weak sensor indication</td>
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<tr>
<td><strong>Local Inhibit Output</strong></td>
<td>Selectable: (4600): 3.5 to 20 mA (4600 MB): 0 to 20 mA</td>
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<td><strong>Self-diagnoses</strong></td>
<td>Weak sensor, missing sensor, transmitter fault</td>
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<td><strong>Max. Sensor Separation</strong></td>
<td>50 feet (15.25 m) from transmitter</td>
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<td><strong>Sensor Life</strong></td>
<td>22 to 24 months average, disposable</td>
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<td><strong>Sensor Battery</strong></td>
<td>3 months continuously powered (no drain when powered)</td>
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<td><strong>Sensor Repeatability</strong></td>
<td>±2% full scale</td>
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<tr>
<td><strong>Sensor Linearity</strong></td>
<td>±2% full scale</td>
</tr>
<tr>
<td><strong>Approvals</strong></td>
<td>(4600): Class 1, Groups B, C and D, Class 2, Group E, F and G, Class 3</td>
</tr>
<tr>
<td>(4600 MB): Class 1, Zone 1, Group EC, Ex II, EEx d IIIC T6</td>
<td></td>
</tr>
<tr>
<td><strong>Warranty</strong></td>
<td>1 year (sensor and transmitter) Except Phosgene (COCl₂) sensor: 6 months</td>
</tr>
</tbody>
</table>
SAFER THROUGH SCIENCE

We Make Sensors that Make a Difference. Unlike most gas detection companies, Scott Health & Safety develops and manufactures the gas sensors used in its detection instruments. Our team of experts works on research and development projects every day to advance sensor technologies and improve manufacturing techniques. The result—one of the most accurate, stable, and gas-specific sensors in our Rock Solid® series of high performance sensors.

SMART SENSOR TECHNOLOGY

Using advanced electrochemical gas sensors such as our high performance Rock Solid® sensor, information from the sensor is used to advance sensor technologies and improve manufacturing techniques. The result—one of the most accurate, stable, and gas-specific sensors in our Rock Solid® series of high performance sensors.

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**SAFE THROUGH SCIENCE**

The Series 4600 GasPLUS is a toxic gas and explosive gas transmitter designed for single and multi-point monitoring applications where ruggedness, reliability, and ease of maintenance are critical. The Series 4600 transmitter is a two-wire device providing a 4 to 20 mA output in addition to the RS-485/232 wiring configuration. Series 4600 transmitters offer RS-485/232 wiring configuration utilizing the MODBUS RTU protocol. As an option, the Series 4600 transmitter can be supplied in a multi-wire configuration. Advanced Gas Sensors and Universal Electronics GasPLUS® sensors use state-of-the-art sensor technology combined with advanced transmitter electronics to help ensure streamline the operator's operation and maintenance requirements. The Series 4600 transmitter is a two-wire device providing a 4 to 20 mA output in addition to the RS-485/232 wiring configuration. Series 4600 transmitters offer RS-485/232 wiring configuration utilizing the MODBUS RTU protocol. As an option, the Series 4600 transmitter can be supplied in a multi-wire configuration.

### FEATURES

- **Easy To Install & Operate**
  - Universal transmitter
  - Horizontal conduit
  - Missingsensor indicator
  - Conformally-coated electronics
  - Universal transmitter
  - Horizontal conduit

- **High Performancetemperature and humidity**
  - Integrated Sensor with transmitter
  - SST Type A (4600MB ONLY)

- **Ordering Options**
  - **Model 46AA**
  - **Series 4600M**
  - **Series 4600**

### HIGH PERFORMANCE TECHNOLOGY

**No-Pins** Connector

- Integral Battery eliminates sensor warm-up
- On-Board electronics eliminates sensor personality
- Rock Solid sensor technology for high performance and fast response

### SMART SENSOR TECHNOLOGY

Using advanced electrochemical toxic gas sensors such as our high performance ROCK SOLID® sensor, the 4600 MB offers additional output flexibility and features in a multi-wire configuration. The 4600 MB offers additional output flexibility and features in a multi-wire configuration. The 4600 MB offers additional output flexibility and features in a multi-wire configuration.

### GAS PLUS

The Series 4600 GasPLUS is a toxic gas single and multi-point monitoring applications where ruggedness, additional output flexibility, Series 4600 providing a 4 to 20 mA output in addition to the RS-485/232 wiring configuration utilizing the MODBUS RTU protocol. As an option, the Series 4600 transmitter can be supplied in a multi-wire configuration.
### SPECIFICATIONS

All specifications shown apply to both Series 4600 and Series 4600 MB unless otherwise noted.

**Enclosure**
- Transmitter: Copper-free cast aluminum, sensor housing: stainless steel with PTFE endcap.

**Temperature Range**
- Transmitter: -40°F to 140°F (-40°C to 60°C).
- Sensor: Depends on gas type. See Gas Capabilities Data Sheet.

**Operating Humidity Range**
- Up to 95% RH, non-condensing (up to 99% RH with optional Humishield).

**Operating Pressure Range**
- 0 to 10 psig.

**Weight**
- 1.8 lbs (2.25 kg).

**Power Requirements**
- (4600 2 wire): 14 to 30 V DC 0.6 W.
- (4600 MB 3 wire): 18 to 27 V DC 1.2 W.
- (4600 MB w/ relays): 18 to 27 V DC 2.0 W.

**Output**
- Transmitter: Analog: 4 to 20 mA (4600 MB). RS-485/232 MODBUS RTU (4600 MB w/ Relay): 2 alarm, 1 fail (all 5 A SPST rated at 120 V); user-selectable latching/non-latching and energized/deenergized.

**Maximum Loop Load**
- (4600 2 wire): 460 ohm at 24 VDC.
- (4600 MB w/ relays): 950 ohm at 24 VDC.

**Display**
- 3.5 digit LCD; 0 to 100% bargraph; alarm indication; inhibit indication; weak sensor indication.

**Local Inhibit Output**
- Selectable (4600): 3.5 to 20 mA.
- (4600 MB): 0 to 20 mA.

**Self Diagnostics**
- Weak sensor, missing sensor, transmitter fault.

**Max. Sensor Separation**
- 50 feet (15.25 m) from transmitter.

**Sensor Type**
- Electrochemical gas detection.

**Sensor Life**
- 22 to 24 months average, disposable.

**Sensor Battery**
- 1 year continuously powered (no drain when powered).

**Sensor Repeatability**
- ±2% full-scale.

**Sensor Linearity**
- ±2% full-scale.

**Approvals**
- (4600): Class 1, Groups B, C, D, Class 2, Group D; FAD: Group 3.
- (4600 MB): Class 1, Zone 1, Group B/C; 3, 4, 1, G; 2, 3.

**Warranty**
- 1 year (sensor and transmitter) except Phosgene (COCl₂) sensor – 6 months.