



## ORDERING INFORMATION

### SF<sub>6</sub> GAS MONITORING

The Optimizer3 aids in the mandatory compliance reporting required by the EPA, resources boards, and other regulatory agencies by monitoring for SF<sub>6</sub> gas leaks and related indicators and automatically reporting any fugitive emissions.

### SF<sub>6</sub> GAS SENSOR PIPE FITTINGS

SF<sub>6</sub> gas sensors can be installed directly into the a pipe feeding the circuit breaker's pressure gauge using SF<sub>6</sub> gas sensor pipe fittings. All gas connections must be checked for leaks if this method is used.



Model	Description
OM-SAM	SF <sub>6</sub> gas sensor pipe fitting for (1) sensor, Mitsubishi circuit breakers only
OM-SAM2	SF <sub>6</sub> gas sensor pipe fitting for (2) sensors, Mitsubishi circuit breakers only
OM-SAA1	SF <sub>6</sub> gas sensor pipe fitting for first sensor, ABB circuit breakers only
OM-SAA2*	SF <sub>6</sub> gas sensor pipe fitting for second sensor, ABB circuit breakers only

\*For ABB circuit breakers, if two SF<sub>6</sub> gas density sensors are required, an OM-SAA1 must be installed in addition to the OM-SAA2.

### SF<sub>6</sub> GAS DENSITY SENSOR

The SF<sub>6</sub> gas density sensor measures the true density of SF<sub>6</sub> gas using patented quartz oscillator technology. Temperature and density measurements are digitally transmitted over a two-wire, power-line-carrier interface.



Model	Description
DSDP	Digital SF <sub>6</sub> gas density sensor, temperature & density, 10 ft cable
DSDP-20	Digital SF <sub>6</sub> gas density sensor, temperature & density, 20 ft cable
DSDP-30	Digital SF <sub>6</sub> gas density sensor, temperature & density, 30 ft cable
DSCC	1/2" NPT conduit fitting adapter

#### Specifications

- Density range: 0 to 60 grams per liter (kg/m<sup>3</sup>) SF<sub>6</sub>
- Temperature range: -40 to 85 °C
- Mounting thread: Male 3/8" BSP
- Seal: Neoprene O-Ring
- Accuracy: "1.8% of full scale max.; 1.0% of full scale typ.
- Temperature signal:  
+/- 1°C at ambient temperature  
+/- 3°C at -40 to 85 °C
- Output signal: Digital (frequency & pulse-width modulated)
- Supply voltage: 10 to 20 Volts DC
- Electrical connections: 2-wire
- Operating temperature -40 to 70 °C
- Operating pressure -1 to 20 Bar



## SF<sub>6</sub> GAS PRESSURE SENSOR

The SF<sub>6</sub> gas pressure sensor measures the temperature-compensated pressure of SF<sub>6</sub> gas. The temperature and the compensated pressure measurements are digitally transmitted over a two-wire, power-line-carrier interface.



Model	Description
PSDP	Digital SF <sub>6</sub> gas pressure sensor, temp & pressure, 5 meter cable
OM-SC5	5 meter cable with 90 degree connector

### Specifications

- Pressure range: 0 to 10 Bar Abs at 20 °C compensated
- Temperature range: -40 to 85 °C
- Mounting thread: Male 3/8" BSP
- Seal: Neoprene O-Ring
- Pressure accuracy:  
+/- 1% of full scale range at 85 °C  
+/- 2.2% of full scale range at -40 to 85 °C
- Temperature accuracy: +/- 3°C
- Output signal: Digital (frequency & pulse-width modulated)
- Supply voltage: 15 to 30 Volts DC
- Electrical connections: 2-wire
- Operating temperature -25 to 80 °C
- Operating pressure: 0 to 20 Bar absolute

## SF<sub>6</sub> GAS DEW POINT TEMPERATURE SENSOR

The SF<sub>6</sub> gas dew point sensor measures the moisture content of SF<sub>6</sub> gas. This solid-state sensor converts the measured dew point temperature to a milliamp analog signal.



Model	Description
OM-DPS	Analog SF <sub>6</sub> gas dew point temperature sensor, 5 meter cable
OM-SC5	5 meter cable with 90 degree connector

### Specifications

- Temperature range: -60 to 20 °C
- Mounting thread: Male 3/8" BSP
- Seal: Neoprene O-Ring
- Accuracy: +/- 2 °C
- Output signal: 4-20 milliamp DC
- Supply voltage: 10 to 32 Volts DC
- Electrical connections: 2-wire
- Operating temperature -50 to 60 °C

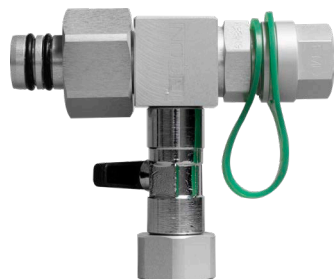


**SF<sub>6</sub> GAS SENSOR FILL PORT ADAPTERS**

SF<sub>6</sub> gas sensor adapters allow the range of sensors to be directly connected to a circuit breaker via the SF<sub>6</sub> gas fill port. Integrated check valves and O-Ring seals facilitate a tight connection, mitigating the risk of a gas leak.



Model	Description
OM-DN8XV	SF <sub>6</sub> gas (2) sensor adapter, cross valve, DN8 coupling



Model	Description
OM-MTV	SF <sub>6</sub> gas sensor adapter, tee valve, Malmquist x DN8 coupling



Model	Description
OM-M2TV	SF <sub>6</sub> gas sensor adapter, tee valve, Malmquist x Malmquist coupling



Model	Description
OM-DN8TV	SF <sub>6</sub> gas sensor adapter, tee valve, DN8 coupling



Model	Description
OM-DN20TV	SF <sub>6</sub> gas sensor adapter, tee valve, DN20 coupling

