

## PRODUCT BULLETIN

# ONGUARD SMART

**The Purafil OnGuard® Smart (OGS) Atmospheric Corrosion Monitor** indicates the level of corrosion before severe damage occurs, preventing costly downtime and maintenance repairs. The OnGuard's copper and silver sensors measure the rate of corrosion in real-time. An internal data logger stores the results to be accessed through the internet or directly transmit to a process control system. The latest generation of OnGuard monitors now includes a **room pressure sensor**.



### Features

- Tracks peaks and trends to determine the level of corrosion
- Measures temperature, relative humidity, and room pressure
- Low maintenance: Sensors remain reliable until reaching 4000 Angstroms of cumulative corrosion
- Direct interface provided by the backlit LCD and keypad
- Remote power from network cable (PoE)
- 4-20mA connection for existing facility management systems or distributed control systems (DCS)
- Accurate within  $\pm 1\%$  of full span

### Benefits

- Indicates the level of corrosion before damage occurs, preventing costly repairs/downtime
- Ethernet enabled
- Easy remote access to data and graphs
- RoHS compliant
- Measures corrosion, room air pressure, temperature, and relative humidity on a continuous basis
- Provides incremental and cumulative corrosion data
- Easy to install
- Long service life
- Readings correspond to ISA Standard 71.04-2013

### Principle of Operation

The OGS comes with two quartz crystal microbalance (QCM) sensors, one that is plated with copper and another with silver. The QCM is used to measure the corrosive film that results from the environment. This highly sensitive method of measurement will indicate contaminant levels at or less than one part per billion (1 ppb). The corrosion film thickness is measured and recorded in Angstroms (Å). This measurement corresponds directly to ISA Standard S71.04-2013.

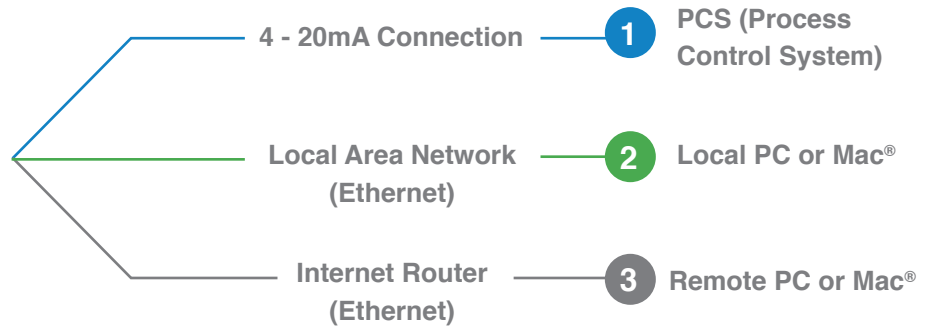
### ISA STANDARD ANSI / ISA-71.04-2013\*

Severity Level	Copper Corrosion	Silver Corrosion
G1 - Mild	<300 Angstroms / 30 days	<200 Angstroms / 30 days
G2 - Moderate	<1000 Angstroms / 30 days	<1000 Angstroms / 30 days
G3 - Harsh	<2000 Angstroms / 30 days	<2000 Angstroms / 30 days
GX - Severe	>2000 Angstroms / 30 days	>2000 Angstroms / 30 days

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### 3 Ways to Connect



### Connectivity Benefits

- Supports Simple Network Management Protocols (SNMP)
- Connect using any device with a web browser
- Communicate via local network and remotely over internet
- Enable Email alerts for alarm thresholds

### Location Requirements

- Install in a controlled environment between -10° and 75° C (14° and 167° F)

### Applications

- Industrial: Pulp & Paper, Manufacturing, Oil Refineries
- Precision Air: Data Centers, Semiconductor
- GLAM: Galleries, Libraries, Archives, Museums

