# GE Sensing & Inspection Technologies

# Kaye RF ValProbe®

# Steam in Place Application

The Kaye RF ValProbe<sup>®</sup> version 1.1 integrates the powerfull RF Wireless Mesh Technology with temperature and pressure measuring capability suitable for easy Steam-In-Place (SIP) applications.

Most wiring is eliminated and the system permits up to 100 distributed nodes measuring both temperature and pressure permitting large SIP systems to be validated or re-validated in single large sections obviating the need for repeated overlapping SIP studies.

The temperature sensor is a precision small diameter bendable type RTD designed to permit easy fitting to pipes and vessels through gaskets. The temperature probe will stay where placed and can be fed along pipe work or placed deep into stainless vessels or filter bodies.

The high accuracy pressure transducer is designed for 121C and 134C operation, having calibration certificate compliant to ISO 17025 at these extended temperatures. It is powered externally, easy to connect and simple to configurate with the RF ValProbe<sup>®</sup> software.



#### **Features**

- Temperature and pressure accuracy meets requirements for ISO-17665, EN554 and EN285 sterilization requirements
- State of the art RF Mesh Networking technology provides reliable real-time process validation data.
- Provides 100% data redundancy in both remote logger and base station in addition to high reliability RF network
- Greater than 1 year battery life in typical use, using Standard AA Lithium batteries
- Easy connection to Kaye Pressure transducer which is designed for the harsh environment applications such as steam sterilizers and SIP systems
- Can be directly connected to 1.5 in triclover flange via SmartGasket<sup>®</sup> or similar gasket design.



GE imagination at work

# Specifications

## **RF ValProbe**<sup>®</sup>

#### Environmental

Body: -40°C to 60°C 0 to 95%RH non condensing

#### Temperature

Range	Accuracy
0°C to 140°C	±0.1°C
-22°C to 0°C	±0.2°C
-80°C to -22°C	±0.5°C
-196°C	±2.0°C

Battery Life (Varies +/- 10%) 10sec sample rate 2000 hours

## **Pressure Transducer**

**Type** Absolute Pressure Transducer

Range 0 bar to 4 bar (59 psia) Absolute

Sensitivity 1V to 5V

Non-linearity & hysteresis ±0.2% combined

**Temp. compensated range** 110°C – 140°C

**Accuracy** 10mbar (0.147 psi) at 110°C – 140°C

#### Calibration

Pressure calibration performed at 23°C and 121°C

#### Partnumbers

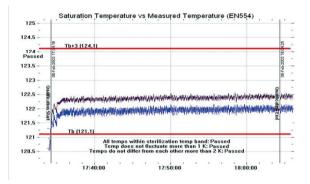
X2570-20B	RF ValProbe® Logger with External 20" Bendable Temperature Probe and RH Sensor
X2571-20B	RF ValProbe <sup>®</sup> with External 20" Bendable temperature Probe, RH Sensor, 0-10v Voltage input and Contact Closure which accomodates Kaye Pressure Transducer
X2572-20B	RF ValProbe® with External 20" Bendable temperature Probe, RH Sensor, 4-20mA Current Input and contact closure
X2558	RF ValProbe <sup>®</sup> Base Station
X2576	Kaye Pressure Transducer 110V
X2576E	Kaye Pressure Transducer 220V
K0448	Feedthru triclover clamp
M1989	SmartGasket <sup>®</sup> Silicone gasket

\* Please contact factory if different probe lengths are required.

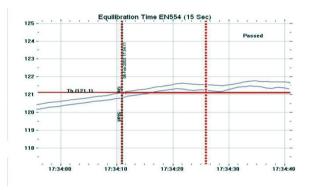


### **Software Features**

Easy intergation between temperature and pressure to enables EN554 compliance and determination of Saturated Steam conditions



#### **Equilibration Calculation**



#### **Services**

GE Sensing provides a complete range of services for the RF ValProbe<sup>®</sup> product range:

- Onsite installation, commissioning and IQ/OQ for RF ValProbe<sup>®</sup> system
- Operator training and technical support
- Maintenance agreements
- Factory calibration
- Rental Services

## www.gesensing.com/kayeproducts

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