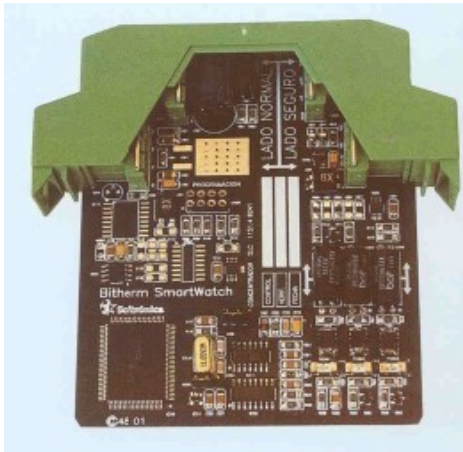


## Description

SmartWatch™ is a microprocessor based multiparametric monitoring device. with high network integration capacity. All sensors are connected to one another in series and to the Control Unit through a single 2 paired cable: one pair of wires for the power supply (5 VDC) and the other for data (RS-485 bus). with a maximum length of 1200 meters, Its basic version includes temperature and ultrasound sensors. It is certified for intrinsic safety requirements (EEx is IIC T4)



## Alarm Modes

Local alarm. Red LED flashes. The system does not require Control Units nor Central PC.

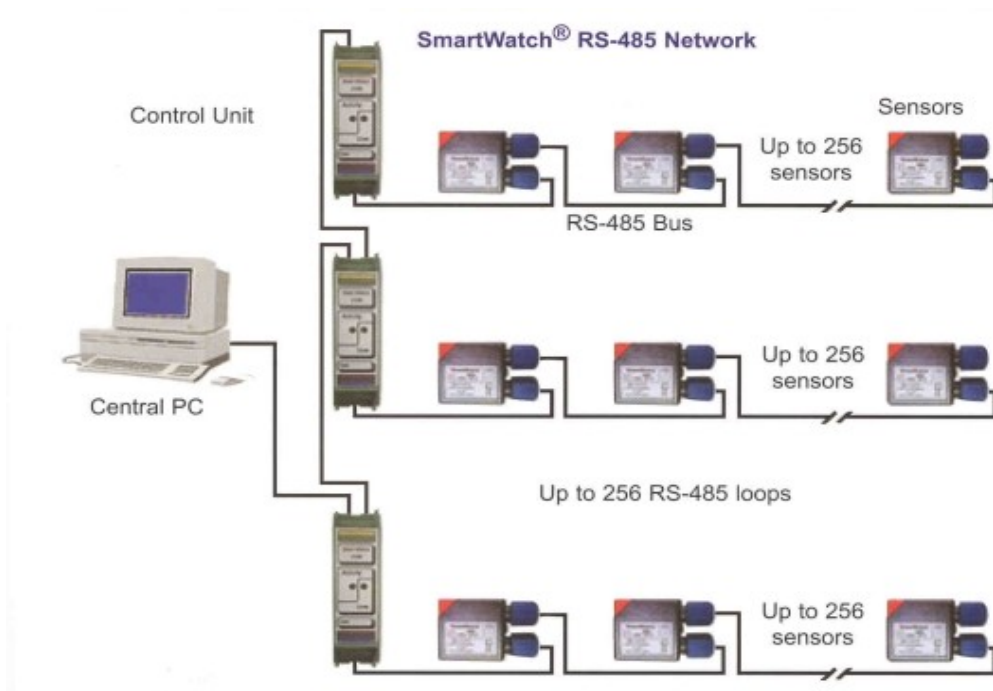
Local and remote alarms: By including a Control Unit per loop and a Central PC, the system gains remarkable performances:

- Alarm in Central PC,
- Automatic management of alarms and failures.
- Self-diagnosis of internal failures in the system.
- Reconfiguration of sensors from the PC.
- System diverse report issue.
- Automatic management of failures and maintenance of devices.

## Typical Applications

- Continuous gas leak detection in safety valves, on-off control valves, etc.
- Safety increase through the continuous detection of dangerous process gases.
- Pollution prevention and environmental protection due to hydrocarbon discharges.
- Continuous detection of hydrocarbons in water.
- Continuous steam leak detection in steam traps.
- Applied on BiTherm steam traps, it constitutes the basis of the modern intelligent steam trap.





SmartWatch<sup>™</sup> RS485 Network Structure

**Suitable system:**

The Control Unit of the SmartWatch<sup>™</sup>, system uses MODBUS RTU protocol, allowing the access to all data in each sensor from any other system, compatible with such protocol.

**Multi-functional:**

The SmartWatch<sup>™</sup> network can manage multiple sensors and parameters, integrated in a common network, becoming a universal alarm system, which can be used for the simultaneous monitoring of different equipment.

**Amplifiable:**

The SmartWatch<sup>™</sup>, network allows its enlargement with new sensor devices in a practically unlimited way. The new sensors are powered at 5 VDC through the same network and recognised as soon as they are enabled in the system.

**Removeable:**

A sensor can be moved from one element to another by installing it between two existing sensors in the network. The sensor is mounted externally with no need to interrupt any of the monitored equipment operation.

**Transmission:**

The SmartWatch<sup>™</sup> network uses an asynchronous Half-Duplex communication at 19200 bps for the bidirectional data transmission, allowing the reception of information from the sensors and the reconfiguration of all operation parameters from the central PC.

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