

WHEN COMPLIANCE BECOMES EFFORTLESS

MAKE SURE IT IS SONTAY

SMART PROTOCOLS



SMART COMMUNICATION

Clamp-on sensors deliver accurate hot & cold water readings without cutting pipes or disrupting service.

Industry-standard encrypted LoRaWAN® communication ensures safe, dependable data transfer.

Send data directly into BACnet IP, MQTT or Modbus, no separate portals, apps or duplicated reporting.



TEMPERATURE MONITORING

CYBER SECURITY & RELIABILITY

SMART BMS INTEGRATION

LEGIONELLA MONITORING WITH SORA LORAWAN SOLUTION



BENEFITS

SAFETY & COMPLIANCE

Continuous monitoring reduces Legionella risk · Supports HSG274 compliance ·



EFFICIENCY

· Fewer site visits and manual checks · Lower total cost than wired solutions

PRECISION

15-minute data for full traceability · Early alerts for unsafe temperatures ·



SCALABILITY

· Add IAQ, leak detection, TRVs, PIR & more · Easy BMS integration (BACnet, Modbus, MQTT)



SORA HUB & SORA Clamp-On Sensors for smarter monitoring

SCAN HERE



Precise, wireless temperature monitoring for stored and recirculated water systems.



This combined SORA Hub + Clamp-On solution replaces costly service-based models with a one-time hardware investment that the customer owns. It reduces reliance on manual checks, minimises labour, eliminates recurring portal fees, and ties all compliance data into a single BMS-driven environment.

What the System Includes:

- SORA LoRaWAN® Gateway for site-wide wireless coverage.
- SORA Clamp-On Temperature Sensors for hot & cold-water systems.
- Direct data streaming into BMS or cloud via BACnet IP / MQTT / Modbus.

Typical Transmission:

Every 15 minutes for continuous temperature traceability and compliance auditing.

Maintaining safe water temperatures is essential for Legionella compliance (HSG274) across offices, healthcare facilities, education buildings, residential blocks, hotels and leisure centres.

Traditional approaches rely on time-consuming manual checks or expensive service-based rental models.

The SORA Hub paired with SORA Clamp-On sensors offers a simple, scalable and low-cost alternative, delivering continuous monitoring without plumbing disruption.

Once installed, the LoRaWAN® infrastructure becomes a future-proof platform for expanding wireless sensing across the entire building.

	Product Code	Applications
1	SORA Hub RF-LW-HUB	LoRaWAN® Gateway for building-wide wireless coverage
2	SORA-CLAMP-ON RF-LW-T-C	Wireless clamp-on temperature sensor for hot/cold water
Optional Products, fully supported once the SORA Hub is installed.		
	RF-LW-TRV	LoRaWAN radiator valve for heating systems
	RF-LW-THLVBC-S	Indoor Air Quality / CO ₂ Monitoring LoRAWAN
	RF-LW-WD-AM	LoRaWAN Water Leak Detection
	RF-LW-PULSE	LoRaWAN Pulse Counter / Energy Monitoring
	RF-LW-VZ	Water Shut-Off Valve LoRAWAN
	RF-LW-THPIR-SP	Wireless Thermostat

LEGIONELLA MONITORING

A smarter way to protect your building, reduce cost, and future-proof your compliance. *Make sure it's Sontay.*

SMART PROTOCOLS

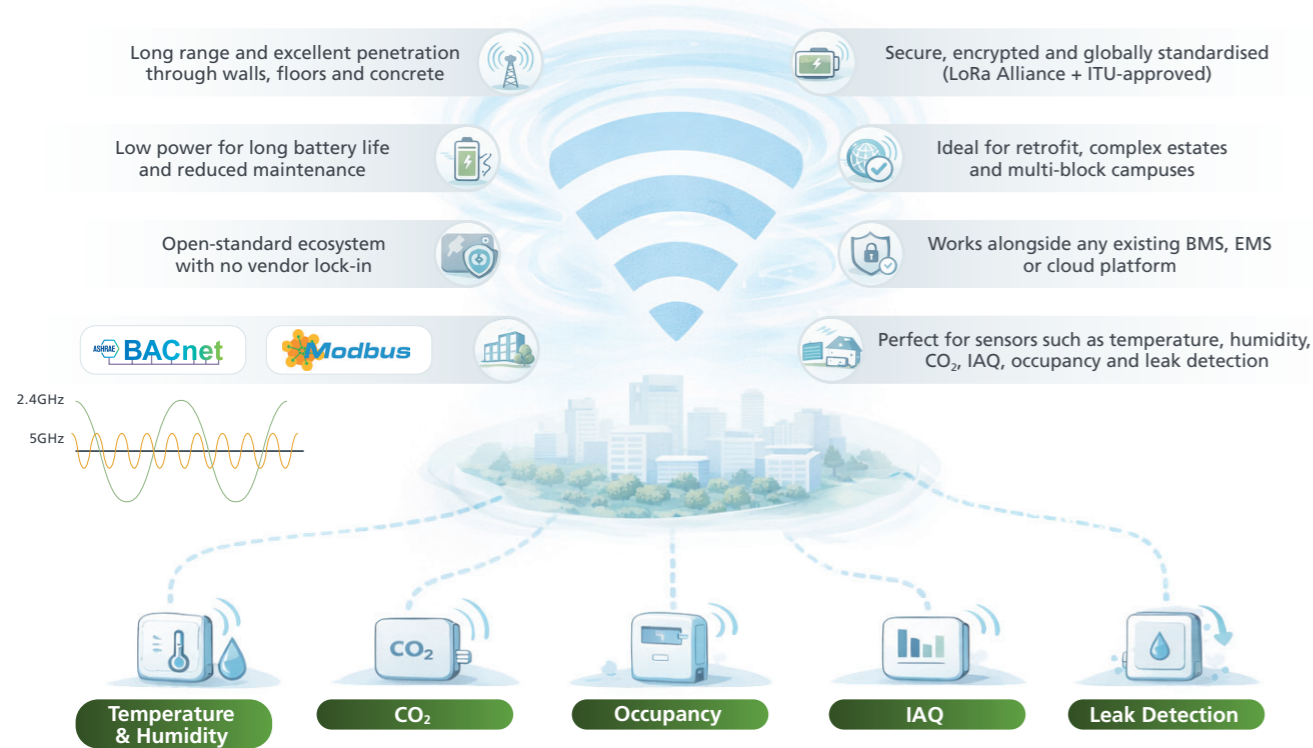




What is LoRaWAN?

LoRaWAN is a long-range, low-power wireless technology designed for building sensors. It delivers reliable communication through complex buildings while using very little energy, enabling multi-year battery life.

KEY ADVANTAGES



Why LoRaWAN for BMS & Smart Buildings?

LoRaWAN technology is a game-changer for Building Management Systems (BMS) and smart buildings due to its long-range, low-power capabilities. It allows for the integration of a vast network of sensors, enabling real-time data collection and monitoring across large areas without the need for extensive wiring. This is particularly beneficial for retrofitting existing buildings, as it minimises disruption and costs.

FOR SYSTEM INSTALLERS

- No containment, no cabling, no ceiling or floor disruption
- Ideal for heritage, live sites, hospitals and offices
- Fast installation and commissioning
- Seamless integration into BACnet/IP, Modbus or MQTT
- Scalable: add devices in seconds without rewiring
- Reduced installation risk, reduced labour, higher project margins

FOR END USERS / BUILDING OWNERS

- Better energy efficiency through granular sensing
- Improved comfort and indoor air quality
- Real-time visibility of environmental conditions
- Reduced ongoing costs and simplified maintenance
- Flexible infrastructure that can grow with building needs
- Compliance with ESG, WELL, RESET and more



For System Installers

For End Users / Building Owners

LoRaWAN brings installers and building owners onto the same page, faster to deploy, easier to scale, and designed to deliver long-term value with minimal disruption.

Why SORA is different?

Combining Sontay's sensing expertise with the power of LoRaWAN for wireless connectivity, offers unparalleled reliability for your projects. When time and cost are key in supporting your projects, SORA is your ideal solution.



Data sheets online: www.sontay.com

Data sheets online: www.sontay.com

Smart Sensing

Smart Sensing

Case Studies

Our SORA and LoRaWAN devices are delivering significant improvements in occupant comfort and energy efficiency across a wide range of buildings. From healthcare environments to airports, the positive impact is clear and measurable.

Measure Improve Sustain



TEMPERATURE SENSORS	HUMIDITY SENSORS	CO₂ SENSORS	DIFFERENTIAL PRESSURE SENSORS	WIRELESS TEMP SENSORS	UNIVERSAL RADIATOR ADAPTER	LORAWAN IOT CONNECTIVITY	DEDICATED CUSTOMER SUPPORT
Monitor & maintain optimal indoor conditions.	Protect passenger comfort and prevent equipment damage.	Measure indoor air quality for healthy environments.	Ensure precise airflow in critical spaces.	10-year batteries for easy, low-maintenance monitoring.	Standardised across the facility for seamless, efficient installation.	Strong wireless link with future-ready IoT performance.	Dedicated support for an easy setup and data you can trust.

Smart Sensing at Scale: Gatwick Airport

Benefits!

- Improved passenger comfort across terminals.
- Reduced energy consumption with efficient control.
- Protection of sensitive equipment and building infrastructure.
- Scalable, reliable sensing for one of the UK's busiest airports.

Did you know?

Gatwick handles over 40 million passengers a year and Sontay sensors help keep every journey comfortable and efficient.



Benefits!

- **Lowest hassle, longest life:** 10-year battery-powered sensors reduce maintenance and disruption.
- **Fast installer-friendly setup:** Uniform radiators meant just one type of adapter, less complexity, faster roll-out.
- **Future-ready IoT network:** LoRaWAN ensures scalable, reliable wireless connectivity throughout the building.
- **Trusted delivery & support:** On-time installation combined with expert support means accurate, dependable data from day one.

Quick stat!

More than **30 apartments, one sensor** for easy comfort control.



Smart & Seamless: Enhancing Comfort in a Scottish Care Home

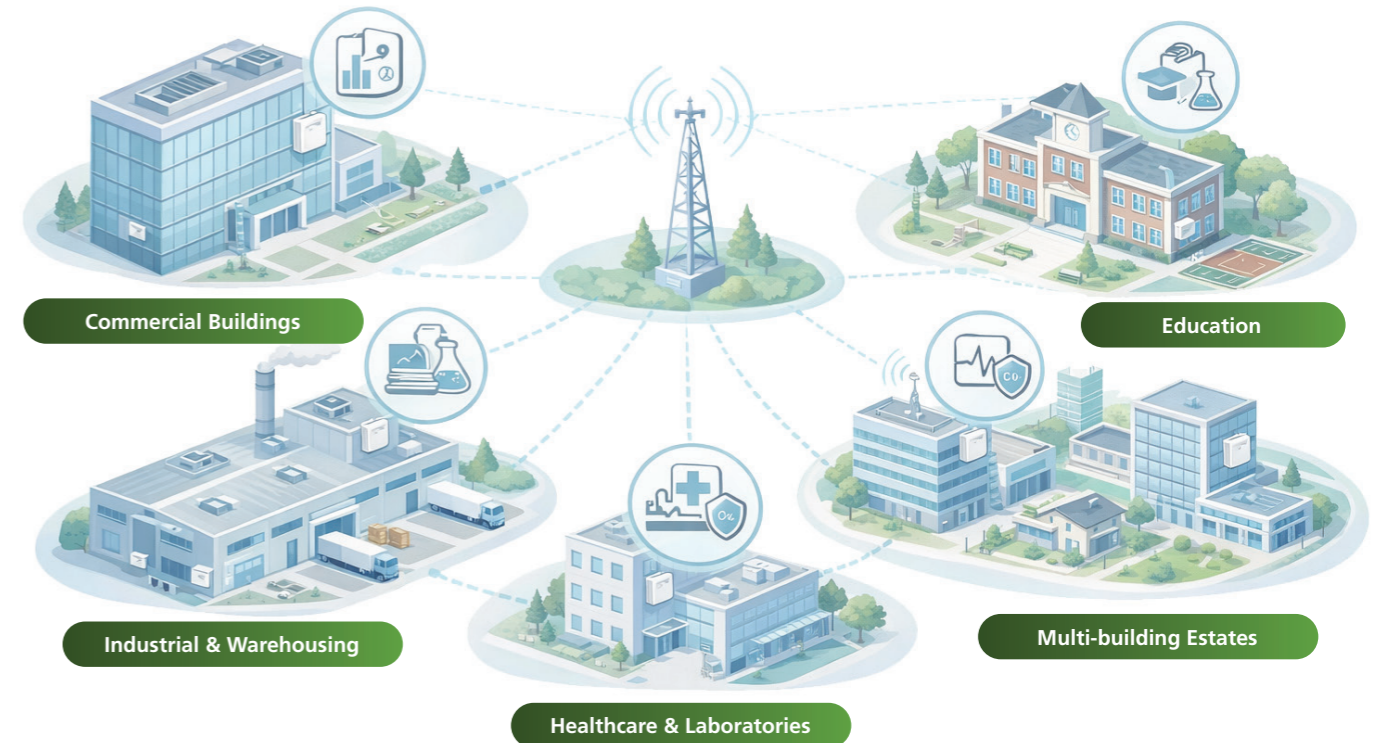
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Ideal Applications

Our SORA LoRaWAN range is suited to any environment requiring long-range, low-disruption wireless sensing with fast, reliable BMS integration:

KEY ADVANTAGES



Commercial Buildings

HVAC, IAQ, energy optimisation and occupancy-driven control.

Healthcare & Labs

Environmental compliance, IAQ, critical area visibility.

Multi-building Estates

Connecting spread-out blocks and mixed infrastructure.

Education

Campus-wide monitoring with minimal installation disturbance.

Industrial & Warehousing

Large-scale monitoring and remote plant areas.

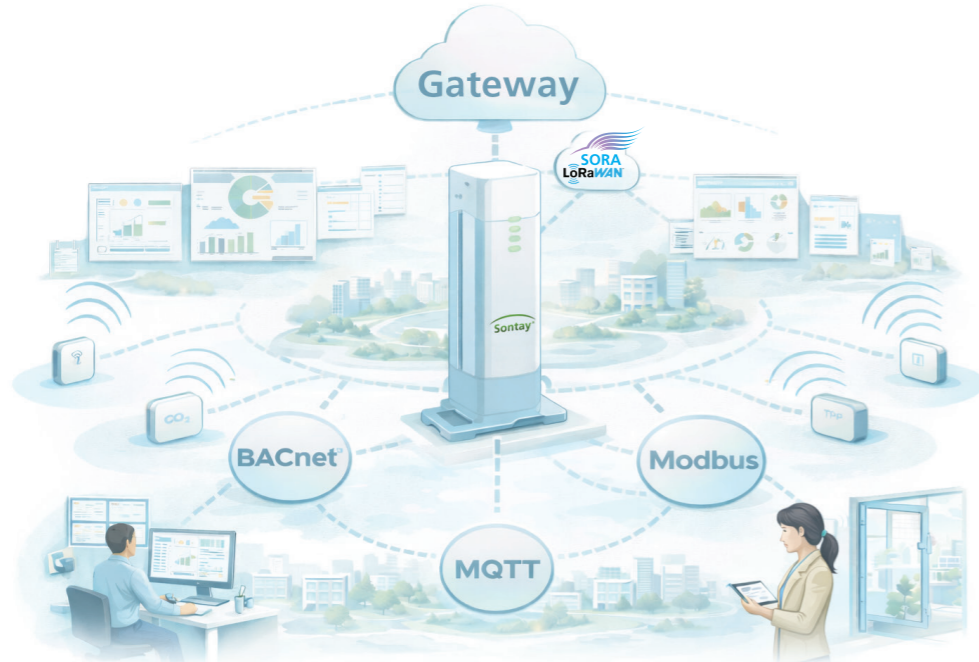
Smart Sensing

Smart Sensing

Why Sontay for your wireless needs?

At Sontay we have been providing unrivalled support for all BMS sensing needs for over 50 years and are forging the way with our wireless LoRaWAN devices. We are your trusted and reliable partner for all of your projects requiring a LoRaWAN solution.

SENSING IS WHAT WE DO!



Warranty

5-year warranty across the range

Support

Lifetime technical support

Expertise

UK-based expertise and fast response

BMS Platform

Seamless interoperability with BMS platforms

Installation

Proven installations across education, healthcare, commercial offices, labs

Solution

A complete solution for building controls

Long-term

Long-term roadmap of sensors, energy monitoring and integration tools

Data sheets online: www.sontay.com

Data sheets online: www.sontay.com

SORA & LoRaWAN Products

SORA® LoRaWAN brings intelligent, low-power wireless sensing to buildings without disruption — fast to install, easy to scale, and designed to support smart, reliable building management for healthier, more efficient spaces. Ready for the buildings of today and tomorrow.

TEMPERATURE & HUMIDITY

SORA Devices

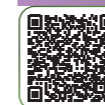


Accessories

RF-AERIAL-PM0.75	Aerial Extension c/w Bulk Head Fitting 0.75 Metre
RF-AERIAL-PM2	Aerial Extension c/w Bulk Head Fitting 2 Metre
RF-AERIAL-PM5	Aerial Extension c/w Bulk Head Fitting 5 Metre
RF-LS14500-S2	2 x Lithium AA size battery

Part code	Description
Temperature only	
RF-LW-T-S	Space mounted temp sensor
RF-LW-T-D	Duct mounted temp sensor
RF-LW-T-I	Immersion temp sensor
RF-LW-T-C	Clamp-on temp sensor
RF-LW-T-O	Outside air temp sensor
RF-LW-T-OR	Outside air with rad shield temp sensor
RF-LW-T-555	Flying lead temp sensor
CO₂ only	
RF-LW-CO2-D	Duct mounted CO ₂ sensor
Temperature & Humidity	
RF-LW-RH-D	Duct mounted temp and humidity sensor
RF-LW-RH-W	Wall mounted temp and humidity sensor
RF-LW-RH-O	Outside temp and humidity sensor
RF-LW-RH-S	Space mounted temp and humidity sensor
Temperature & CO₂	
RF-LW-CO2-T-S	Space mounted temp and CO ₂ sensor
Temperature, Humidity & CO₂	
RF-LW-RHT-CO2-S	Space mounted CO ₂ , temp and humidity sensor

RF-LW LoRaWAN Thermostats



FAN COIL THERMOSTAT LORAWAN



The RF-LW-TH-FSSP Fan Coil Thermostat (FCT) is a LoRaWAN device for 2- and 4-pipe Fan Coil Units, accommodating 3-speed or ECM fans. Ideal for building retrofitting, it enhances energy efficiency and reduces heating/cooling expenses significantly. With its 4.2" e-ink fast refresh display it allows the end-user to change the target temperature and see current indoor conditions.

FEATURES

- Fast refresh e-ink display provides overview of the indoor environment
- Compatible with 2-pipe and 4-pipe Fan Coil Units (FCU)
- Works with 1-3-speed fans and ECM (0-10V) fans (FCU)

Part code	Description
RF-LW-TH-FSSP	Fan Coil Thermostat LoRaWAN
Power Requirement	110-230VAC (Included)



WIRELESS THERMOSTAT LORAWAN



Our RF-LW-THPIR-SP Wireless Thermostat is a stand-alone thermostat powered entirely by solar energy using an organic solar panel. The device features a 2.9" e-ink screen, sensor for movement (PIR), temperature and humidity sensor, LUX sensor and 3 buttons. The user can change the target temperature and see current indoor conditions. The device sends an uplink after any event as well as periodically.

FEATURES

- Motion Detection
- Organic Solar Panel charged by room light
- Integrates with BMS and other devices for optimum room control

Part code	Description
RF-LW-THPIR-SP	Wireless Thermostat LoRaWAN
Power Requirement	Solar-powered Lithium-ion capacitor (LIC) AND/OR 4xAA 1.5VDC batteries AND/OR USB-C

Smart Sensing

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AIR QUALITY

SORA Devices



LoRa is a wireless communication technology dedicated to long distance and low power consumption. Compared with other communication methods, LoRa spread spectrum modulation method greatly increases to expand the communication distance.

Part code	Description
Temperature & CO₂	
RF-LW-CO2-T-S	Space mounted temp and CO ₂ sensor
CO₂ only	
RF-LW-CO2-D	Duct mounted CO ₂ sensor
Accessories	
RF-AERIAL-PM0.75	Aerial Extension c/w Bulk Head Fitting 0.75 Metre
RF-AERIAL-PM2	Aerial Extension c/w Bulk Head Fitting 2 Metre
RF-AERIAL-PM5	Aerial Extension c/w Bulk Head Fitting 5 Metre
RF-LS14500-S2	2 x Lithium AA size battery



FEATURES

- NFC for configuration
- Over air configuration, pairing mode
- Long-range communication
- Excellent battery life
- Easy to configure/install

RF-LW-TIAQ LoRaWAN Indoor Air Quality Monitoring



Our Indoor Air Quality Monitor is a precision instrument which accurately measures up to 9 key environmental parameters including Temperature, Relative humidity, Light level, Particle Matter (PM1, PM 2.5, PM4 & PM10), Sound Level, Volatile organic compounds, Carbon Dioxide, Barometric Pressure. Up to two additional gas sensors may be fitted; one of which must be ozone if two sensors are required. Ammonia, Ozone, Formaldehyde, Carbon Monoxide, Nitrogen Dioxide, Hydrogen Sulphide, Sulphur Dioxide and Oxygen.

FEATURES

- Leading edge optical and digital sensors provide high accuracy and long life
- Drift free readings without further calibration
- Helping companies achieve WELL® and RESET® compliance
- Built in USB port for easy configuration
- Ultimate wireless connectivity through LoRaWAN
- Simple integration with BACnet and Modbus through gateway

Part code	Description
RF-LW-TIAQ	Indoor Air Quality Monitor. Temperature, Relative Humidity, VOC's, Barometric Pressure. Particulate Matter - PM 1, 2.5, 4, 10 (MCERTS Certified). Carbon Dioxide - CO ₂ IWBI WELL v2 Compliant
RF-LS14500-S2	4 x Lithium AA size battery OR 12-24VDC
RF-LW-TIAQ-CO2	Indoor Air Quality Monitor with ultrafine particle sensor. Temperature, Relative Humidity, VOC's, Barometric Pressure. Particulate Matter - PM 0.1, 0.3, 0.5, 1, 2.5, 5, 10 Carbon Dioxide - CO ₂ IWBI WELL v2 Compliant. Requires external power 12-24V DC.
Power Requirement	12-24V DC or via a PoE splitter
RF-LW-TIAQ-VAPE	Indoor Air Quality Monitor with vape/cigarette smoke detection function and ultrafine particles. Temperature, Relative Humidity, VOC's, Barometric Pressure. Particulate Matter - PM 0.1, 0.3, 0.5, 1, 2.5, 5, 10 Carbon Dioxide - CO ₂ IWBI WELL v2 Compliant. Requires external power 12-24V DC.
Power Requirement	12-24V DC or via a PoE splitter
Accessories	
-SND	Sound monitoring option, available for all IAQ Models

RADON FEATURE

Radon, a naturally occurring radioactive gas that can enter buildings unnoticed and accumulate in enclosed spaces, where it poses a serious long-term health risk. As radon is invisible, odourless, and tasteless, reliable and specialised measurement is essential.

Part code	Description
RF-LW-TIAQ-R	IAQ Monitor Temperature, Relative Humidity, Volatile Organic Compounds, Barometric Pressure, Radon
RF-LW-TIAQ-RC	IAQ Monitor Temperature, Relative Humidity, Volatile Organic Compounds, Barometric Pressure, Carbon Dioxide, Radon
RF-LW-TIAQ-RCP	IAQ Monitor Temperature, Relative Humidity, Volatile Organic Compounds, Barometric Pressure, Carbon Dioxide, Particulate Matter- PM 1, 2.5, 4, 10, Radon
Power Requirement	1 x Lithium D-Cell 3.6V, or external power 12-24V DC

RF-LW-TIAQ-OX LoRaWAN Indoor Air Quality Monitoring Enhanced



Our Air Quality Monitor is a precision instrument which accurately measures up to 14 key environmental parameters including Temperature, Humidity, Light Level, VOC's, Carbon Dioxide, Particulate Matter (PM1, 2.5, 4 & PM10), Oxygen, Barometric Pressure, Ozone, Sound Level, plus up to 4 plug-in calibrated gas sensors from a range of over 200 gases / sensitivities.

FEATURES

- Built in USB port for configuration
- Multiple sensor options
- Vertical wall mounting or horizontal ceiling mounting
- Whisper quiet fan to draw air through the enclosure for sampling & monitoring

Part code	Description
RF-LW-TIAQ-OX	Air - Indoor Air Quality Monitor with Temperature, Relative Humidity, Light Level (LUX), VOC's, Barometric Pressure, CO ₂ , Oxygen, Particulate Matter - PM1, 2.5, 4, 10 (MCERTS Certified). IWBI WELL v2 Compliant.
Power Requirement	12-24V Volts DC. 1 Amp (max)

RF-LW-TOAQ LoRaWAN Outdoor Air Quality Monitoring



Outdoor air quality monitor measures key environmental parameters continuously and in real time with exacting accuracy. Using cutting-edge digital and gas sensing technology, the OAQ ensures drift-free reading without further calibration and extended instrument longevity.

Available with temperature, relative humidity, particulate matter, CO₂, Ozone, VOC's, barometric pressure, sound level and internationally approved Air Quality Index - AQI.

FEATURES

- Accurately measures up to ten key outdoor air quality parameters
- Powered via battery or an external source
- Optional Solar Power Supply (SP5)
- Optional gas sensor, CH₂O, CO, NO₂, H₂S, SO₂
- Optional sound sensor
- Communicates via outstanding LoRaWAN wireless technology
- Simple integration into BMS via BACnet or Modbus gateway

Part code	Description
RF-LW-TOAQ	Outdoor Air Quality Monitor Temperature, Relative Humidity, VOC's, Barometric Pressure. Particulate Matter - PM1, 2.5, 4, 10 (MCERTS Certified). EPA AQI Air Quality Index (based on NO ₂ and O ₃).
RF-LW-TOAQ-CO2	Outdoor Air Quality Monitor. Temperature, Relative Humidity, VOC's, Barometric Pressure. Particulate Matter - PM1, 2.5, 4, 10 (MCERTS Certified). EPA AQI Air Quality Index (based on NO ₂ and O ₃). Carbon Dioxide - CO ₂
RF-LS14500-S2	4 x Lithium AA sized battery OR 12-24V Volts DC. 0.15 Amp (max) (2+ Years)

RF-LW-THLC-S LoRaWAN Organic Solar Air Quality Sensor



This clever sensor is equipped with temperature and humidity, LUX and NDIR CO₂ sensor. Featuring a 1.54" e-ink screen the device displays the current levels of CO₂ as well as historical trends.

The data is transmitted by LoRaWAN connectivity to a gateway which converts it to BACnet or Modbus to be utilised in any Building Management System to control demand-based ventilation.

FEATURES

- ABC calibration for accurate CO₂ measurement
- Solar power offers a maintenance free solution
- Simple and fast installation
- Ideal for school applications

Part code	Description
RF-LW-THLC-S	LoRaWAN Solar Air Quality Sensor

Data sheets online: www.sontay.com

Data sheets online: www.sontay.com

Smart Sensing

Smart Sensing

INDOOR ENVIRONMENTAL SENSORS

RF-LW-THVB LoRaWAN Wireless Indoor Environment Sensors



Part code	Description
RF-LW-THVB-S	Temperature, Humidity, VOC's, Barometric Pressure
RF-LW-THLVBPM-S	Temperature, Humidity, Light Level (LUX), VOC's, Barometric Pressures, Motion (PIR)
RF-LW-THLVBC-S	Temperature, Humidity, Light Level (LUX), VOC's, Barometric Pressure, CO ₂
RF-LW-THLVBCM-S	Temperature, Humidity, Light Level (LUX), VOC's, Barometric Pressure, CO ₂ , Motion (PIR)
RF-LS14500-S2	2 x Lithium AA-size battery (>3 Years)



Part code	Description
RF-LW-THLVBS-S	Temperature, Humidity, Light Level (LUX), VOC's, Barometric Pressure, Sound (dBA)
RF-LW-THLVBMS-S	Temperature, Humidity, Light Level (LUX), VOC's, Barometric Pressure, Motion (PIR), Sound (dBA)
RF-LW-THLVBCS-S	Temperature, Humidity, Light Level (LUX), VOC's, Barometric Pressure, CO ₂ , Sound (dBA)
RF-LW-THLVBCMS-S	Temperature, Humidity, Light Level (LUX), VOC's, Barometric Pressure CO ₂ , Motion (PIR), Sound (dBA)
RF-LS14500-S2	Up to 4 x Lithium AA-size battery OR 2 pole Molex push button connector 12-24V DC (>3 Years)

FEATURES

- Multiple sensor options
- Built in USB port for power and configuration
- Battery or mains powered
- Long-range communication via LoRaWAN wireless technology
- Integration with any BMS through BACnet or Modbus through gateway

Wireless sensors measuring up to 8 air quality / environmental parameters. The sound monitoring sensors also have additional battery capacity, all the sensors can be externally powered if desired.

Leading edge digital sensors to provide high accuracy, long life, drift free readings without further calibration. The optical CO₂ sensor provides high accuracy readings with a sensor life of greater than 15 years.



Data sheets online: www.sontay.com

Data sheets online: www.sontay.com

METERING

RF-LW-PULSE LoRaWAN Pulse Counter



This handy device counts meter pulses on three channels and transmits the accumulated data to the cloud using LoRaWAN wireless where it can be displayed and analysed. It is the easiest, fastest way to access your energy data in real time.

There are three SO standard pulse inputs to collect data from electricity, gas, water, heat or any other pulse enabled meter. A Change-of-State feature can be optionally enabled. This will send a radio packet when any of the inputs change from open to closed, or closed to open.

FEATURES

- 3 channel meter pulse counting
- Change of state monitoring
- SO standard pulse duration counting
- Battery-powered, life span of 3+ years
- Simple, quick installation
- Easy configuration & and monitoring via USB
- Signal strength, battery level and meter pulse indicator 3-channel

Part code	Description
RF-LW-PULSE	Pulse Counter LoRaWAN
RF-LS14500-S2	2 X Lithium AA size battery (3+ Years)

RF-LW-HARVY2 LoRaWAN Current sensor with 4 inputs



Self-powered LoRaWAN IoT sensor with four inputs for versatile monitoring in electrical supply networks.

FEATURES

- Convenient metering of three-phase RMS currents from: electrical mains, sub-distribution boards, and/or directly from the machines
- Four independent inputs for clamp-on current transformers and voltage transformer
- CT & VC Used together can monitor: active power, power factor, reactive power, apparent power, mains voltage, mains frequency
- No external power supply or battery required (energy harvesting)
- Easy configuration via USB-C

Part code	Description
RF-LW-HARVY2	LoRaWAN Current sensor with 4 inputs
RF-LW-HARVY2-CT150	Current Transformer 150A Max 50mm
RF-LW-HARVY2-CT300	Current Transformer 300A Max 150mm
RF-LW-HARVY2-CT500	Current Transformer 500A Max 300mm
RF-LW-HARVY2-CT80	Current Transformer 80A Max 25mm
RF-LW-HARVY2-VC	Voltage converter

Smart Sensing

Smart Sensing

RF-LW-HM LoRaWAN Heat Meters



The RF-LW-HM range of heat meters deliver accurate, reliable measurement of thermal energy consumption for residential, commercial and district heating applications. Using advanced ultrasonic and mechanical technologies, these meters ensure fair billing, long-term stability and low maintenance performance. The RF-LW-HM heat meters integrate seamlessly into modern smart building and energy management systems. Robust construction, flexible installation and MID-approved accuracy make them a trusted solution for precise heat and cooling metering.

FEATURES

- Ultrasonic flow measurement technology for high precision heat, cooling and combined metering, with no moving parts. Or inductive turbine measurement for trustworthy thermal energy calculation.
- LoRaWAN communication enables remote reading and integration with building management systems.
- Multi digit LCD screens show energy consumption in kWh, MWh, MJ or GJ.

Part code	Description
RF-LW-HM-15-M	Heat Meter BSP DN15 QP1.5 Mechanical Battery Powered
RF-LW-HM-20-M	Heat Meter BSP DN20 QP2.5 Mechanical Battery Powered
RF-LW-HM-15-UC	Heat Meter BSP DN15 QP1.5 Ultrasonic Composite Battery Powered
RF-LW-HM-20-UC	Heat Meter BSP DN20 QP2.5 Ultrasonic Composite Battery Powered
RF-LW-HM-15-UB	Heat Meter BSP DN15 QP1.5 Ultrasonic Brass Battery Powered

Part code	Description
RF-LW-HM-20-UB	Heat Meter BSP DN20 QP2.5 Ultrasonic Brass Battery Powered
RF-LW-HM-25-UB	Heat Meter BSP DN25 QP3.5 Ultrasonic Brass Battery Powered
RF-LW-HM-15-UB-C	Heat Meter BSP DN15 QP1.5 Ultrasonic Brass Battery Powered Commercial
RF-LW-HM-20-UB-C	Heat Meter BSP DN20 QP2.5 Ultrasonic Brass Battery Powered Commercial
RF-LW-HM-25-UB-C	Heat Meter BSP DN25 QP3.5 Ultrasonic Brass Battery Powered Commercial

RF-LW-IO-16A LoRaWAN Switch and Power Meter



The device is small enough to fit behind most wall switches and power equipment, enabling you to automate, track, and control your electrical appliances. This is possible as the device has 4 terminals L, N, N, Lout, and it works in a way that connects and disconnects Lout from L. With an overheating protection mechanism, it is ideal for rapid building retrofitting.

FEATURES

- Compact Design
- Firmware Upgrades Over The Air
- Class C End-device
- Safety First Design
- Internal temperature sensor and overheating protection

Part code	Description
RF-LW-IO-16A	16A Switch & Power Meter LoRaWAN

RF-LW-IO-16ADS LoRaWAN Dry Switch



The device is small enough to fit behind most wall switches and power equipment, enabling you to automate, track, and control your electrical appliances. The device has 4 terminals L, N, I, O, connecting and disconnecting I from O. The 16A Dry Switch features an overheating protection mechanism, operates in LoRaWAN Class C and supports firmware upgrades over the air.

FEATURES

- Compact Design
- Simply acts as an On/Off switch
- Real time control with schedule set ups
- FUOTA (Firmware Upgrade Over The Air)
- 16A at 240VAC and 10A at 30VDC
- Internal temperature sensor and overheating protection

Part code	Description
RF-LW-IO-16ADS	16A Switch & Power Meter LoRaWAN

RF-LW-WF LoRaWAN clamp on flow meter



The RF-LW-WF is designed to simplify water management for property owners and facility managers. Its seamless compatibility with leading IoT platforms ensures you can integrate advanced water monitoring into your existing systems without disruption or costly upgrades. From water data collection, to leak alerts the RF-LW-WF makes managing water systems easier than ever.

FEATURES

- Non-invasive clamp on installation - no pipe cutting, welding or plumbing required
- Wireless connectivity via LoRaWAN and or M-bus for remote monitoring and data collection
- Long battery life (up to 10 years) and minimal maintenance required
- Built in leak detection.

Part code	Description
RF-LW-WF-C	LoRaWAN clamp on flow meter for copper piping
RF-LW-WF-P	LoRaWAN clamp on flow meter for plastic piping

RF-LW-WM Wireless Water Meters



The product range includes digital SMART water meters, turbine (velocity) type single and multi-jet water meters with mechanical or magnetic transmission, Woltmann meters, with direct reading or complete with integrated modules for the remote transmission of the consumption data.

Part code	Description
RF-LW-WM-15-DSC	Water Meter BSP DN15 Q3 2.5m³/h Digital Single Jet Cold
RF-LW-WM-15-DSH	Water Meter BSP DN15 2.5m³/h Digital Single Jet Hot
RF-LW-WM-15-MMH	Water Meter BSP DN15 Q3 2.5m³/h Mechanical Multi Jet Hot
RF-LW-WM-15-MSH	Water Meter BSP DN15 Q3 2.5m³/h Mechanical Single Jet Hot
RF-LW-WM-20-DMC	Water Meter BSP DN20 Q3 4m³/h Digital Multi Jet Cold
RF-LW-WM-20-DSC	Water Meter BSP DN20 Q3 4m³/h Digital Single Jet Cold
RF-LW-WM-20-DSH	Water Meter BSP DN20 Q3 4m³/h Digital Single Jet Hot
RF-LW-WM-20-MMC	Water Meter BSP DN20 Q3 4m³/h Mechanical Multi Jet Cold
RF-LW-WM-20-MMH	Water Meter BSP DN20 Q3 4m³/h Mechanical Multi Jet Hot
RF-LW-WM-20-MSC	Water Meter BSP DN20 Q3 4m³/h Mechanical Single Jet Cold
RF-LW-WM-20-MSH	Water Meter BSP DN20 Q3 4m³/h Mechanical Single Jet Hot
RF-LW-WM-25-DMC	Water Meter BSP DN25 Q3 6.3m³/h Digital Multi Jet Cold
RF-LW-WM-25-MMC	Water Meter BSP DN25 Q3 6.3m³/h Mechanical Multi Jet Cold
RF-LW-WM-32-DMC	Water Meter BSP DN32 Q3 10m³/h Digital Multi Jet Cold
RF-LW-WM-32-MMC	Water Meter BSP DN32 Q3 10m³/h Mechanical Multi Jet Cold
RF-LW-WM-40-MMC	Water Meter BSP DN40 Q3 16m³/h Mechanical Multi Jet Cold
RF-LW-WM-F50-M-H	Water Meter PN16 Flanged DN50 Q3 40m³/h Hot
RF-LW-WM-F65-M-H	Water Meter PN16 Flanged DN65 Q3 63m³/h Hot

FEATURES

- Precise single-jet, multi jet and ultrasonic measurement technologies available, suitable for wide range of applications.
- 360° rotating dials easy to read from any angle during installation or maintenance.
- Wireless communication featuring LoRaWAN and M-BUS for remote connectivity.
- IP68 protection rating offers excellent resistance against dust, dirt and temporary submersion.

Data sheets online: www.sontay.com

Data sheets online: www.sontay.com

LEAK DETECTION

RF-LW LoRaWAN Water Control

FLOOD SENSOR LORAWAN



10 Year Battery Life

Flood Sensor is a discreet device designed to quickly detect floods as they happen and within seconds sends notifications to your system as well as activate an audible alarm on the spot. Featuring a temperature sensor, an LED, and a Buzzer, the device enables you to immediately respond when a flood occurs.

- FEATURES**
- 10 year battery life
 - Works with T-Valve to shut off water supply on detection of a flood

Part code	Description
RF-LW-WD-FLOOD	Flood Sensor LoRaWAN
Power Requirement	CR123A (10 Years)

WATER SHUT-OFF VALVE LORAWAN



12 Year Battery Life

T-Valve is LoRaWAN 1.0.1, a class A device that allows you to control the water flow remotely and prevents major water damage. With 3/4" and 1 1/4" versions, respectively DN20 and DN32, the device fits all standard plumbing systems and is suited to all building types. Equipped with buttons, LEDs, a Buzzer, and device status indicators you can also interact with it manually along with the core remote control functions.

- FEATURES**
- 12 year battery life
 - Drinking water certified
 - Support legionella prevention

Part code	Description
RF-LW-VZ	Water Shut-Off Valve LoRaWAN
Power Requirement	LiSO C12 ER26500 3.6V 9000mAh (Included) (12 Years)

Data sheets online: www.sontay.com

RF-LW-WD LoRaWAN Water Detection



3+ Year Battery Life

Detects the presence of water leaks, flooding and condensation using water detection cable. Leakage or moisture is detected over the entire length of the cable, various cable lengths are available to facilitate leakage sensing over a wide area. When a leak is detected, a message is transmitted using long range LoRa wireless to generate an alarm so early action can be taken.

Part code	Description
RF-LW-WD-AM-3M	Water leak detector plus 3 metre detection cable plus 1m leader.
RF-LW-WD-AM-1M	Water leak detector plus 1 metre detection cable plus 0.5m leader
RF-LW-WD-AM-5M	Water leak detector plus 5 metre detection cable plus 0.5m leader
RF-LW-WD-AM-10M	Water leak detector plus 10 metre detection cable plus 0.5m leader
RF-LS14500-S2	2 X Lithium AA size battery (3+ Years)

PRESSURE

RF-LW-DP1 LoRaWAN Pressure Sensing



3+ Year Battery Life

The RF-LW-DP1 measures differential pressure in the range of 0 to 5000Pa with industry leading accuracy of 0.1% of selected range. Our unique Multi-Range digital sensor allows multiple pressure ranges to be selected automatically. Differential Pressure data is transmitted using long range LoRa wireless where the device data can be displayed and analysed to reveal operational performance and generate alerts.

Part code	Description
RF-LW-DP1	Status with Differential Pressure 0 to 5000Pa
RF-LS14500-S2	2 X Lithium AA size battery (3+ Years)

RF-LW-GP1 LoRaWAN Gauge Pressure Sensor



3+ Year Battery Life

Our RF-LW-GP1 measures gauge pressure with industry leading accuracy. It is a vital tool in areas where the need to monitor liquid or gas pressure is paramount, such as in laboratories and medical applications and BMS applications.

The one-piece 17-4ph stainless-steel construction is suitable for use in environments where material corrosion may occur such as contaminated water, steam, and mildly corrosive fluids.

Part code	Description
RF-LW-GP1	Status with Gauge Pressure 0 to 10 Bar
RF-LS14500-S2	2 X Lithium AA size battery (3+ Years)

RF-LW-AV Air Velocity



3+ Year Battery Life

Our RF-LW-AV range measure air velocity in the range of 0 to 40m/s with industry leading accuracy of 0.1% of selected range. A unique Multi-Range digital sensor allows multiple ranges to be selected automatically or remotely. These sensors can be used to ensure that recommended air flow rates for public buildings and industrial plant are achieved.

Part code	Description
RF-LW-AV-100	Status with Air Flow. 100mm Air Velocity Probe
RF-LW-AV-200	Status with Air Flow. 200mm Air Velocity Probe
RF-LW-AV-300	Status with Air Flow. 300mm Air Velocity Probe
RF-LW-AV-400	Status with Air Flow. 400mm Air Velocity Probe
RF-LW-AV-500	Status with Air Flow. 500mm Air Velocity Probe
RF-LW-AV-600	Status with Air Flow. 600mm Air Velocity Probe
RF-LS14500-S2	2 X Lithium AA size battery (3+ Years)

Data sheets online: www.sontay.com

Smart Sensing

Smart Sensing

AUTOMATION

RF-LW LoRaWAN Automation Devices



The Multi-Purpose Button LoRaWAN allows you to control various smart functions with a single press. Through the app, you can configure the button to trigger climate control actions, like adjusting heating or cooling systems. For example, pressing the button can activate a pre-set temperature or switch the system to energy-saving mode when you leave. This makes managing your home's climate simple and efficient.

The Open/Close Sensor LoRaWAN helps monitor the opening and closing of doors or windows, which can be controlled via an app. The app lets you set up notifications and integrates with climate control systems to automatically adjust heating or cooling when a window or door is opened. This smart function helps maintain an efficient climate by reducing energy waste.

LoRaWAN Multipurpose Button is a simple but versatile device with many applications. Featuring a single button with 3 types of clicks and a temperature sensor, there are unlimited configuration options across industries and end customers. With a 10 year battery life, it has endless possibilities.

The Open/Close window and door detector can detect even slightly opened windows and doors, increasing the security and protection of any building, contributing to energy management and automation.

APPLICATIONS

- Hospital or nursing home call button
- Restaurants to call staff
- Hotels to request services

FEATURES

- Built in temperature sensor to support control of room temperature
- 10 year battery life
- Tool free installation

Part code	Description
RF-LW-BTN	Multi-Purpose Button LoRaWAN
Power Requirement	ER10280 (Included) (10 Years)

Part code	Description
RF-LW-OC	Open/Close Sensor LoRaWAN
Power Requirement	ER14250 or 1/2 AA (Included) (10 Years)

RF-LW-VC-IN Active Output Sensor Converter



This clever device measures Voltage (0-10V) or Current (0-20mA) and transmits the reading using long range LoRa wireless where the device data can be displayed and analysed. Any sensor or instrument with a 0-10V or 4-20mA signal can be instantly converted into a wireless device so that the information can be easily remotely acquired.

Part code	Description
RF-LW-VC-IN	Status with Voltage (0-10V) or Current (0-20mA)
RF-LS14500-S2	2 X Lithium AA size battery (3+ Years)

Data sheets online: www.sontay.com

RF-LW-TRV LoRaWAN TRV Smart Radiator Thermostat



Vicki LoRaWAN® Smart Radiator Thermostat is tailored specifically to improve energy efficiency, achieve substantial cost savings and reduce the CO₂ footprint within all types of buildings through its remote temperature control capabilities and innovative data analytics.

With seamless integration into various BMS systems, through BACnet or Modbus protocols via a gateway, installation and control is effortless.

FEATURES

- Simple and fast installation
- 10 year battery life
- Remotely or manually adjust temperature in any room
- Temporarily stops heating when an open window is detected

Part code	Description
RF-LW-TRV-RUGGED	Thermostatic radiator valve
RF-LW-TRV-CALEFFI	Adapter for TRV to Cale i (Caleffi)
RF-LW-TRV-GIA	Adapter for TRV to Giacomini
RF-LW-TRV-M28	Adapter for TRV to M28
RF-LW-TRV-ORAS-STA	Adapter for TRV to ORAS Stabilla M28
RF-LW-TRV-ORAS-TER	Adapter for TRV to ORAS Thermostat M26
RF-LW-TRV-RA	Adapter for TRV to RA
RF-LW-TRV-RAV	Adapter for TRV to RAV
RF-LW-TRV-RAVL	Adapter for TRV to RAVL



GATEWAYS & BRIDGES

RF-LW-MODB LoRaWAN ModBus Bridge



Our Modbus Bridge instantly converts wired Modbus devices such as meters, PLC's and sensors to LoRaWAN long range wireless. Any instrument, device or sensor with a wired Modbus RS485 interface can be read and converted to a LoRaWAN wireless device.

Part code	Description
RF-LW-MODB	Modbus Bridge - 32 Data Points
Power Requirement	Externally powered 12-24V DC (120mA max.)

Data sheets online: www.sontay.com

Smart Sensing

Smart Sensing

Gateways

Gateways link LoRaWAN® sensors to IP networks, forming the communication backbone of the system.



RF-LW-HUB Indoor LoRaWAN 8-Channel Gateway



LoRa® Technology for Building Management Systems with BACnet™ Connectivity

Our Indoor LoRaWAN 8-Channel Gateway, powered by the mPower™ Edge Intelligence OS, serves as a gateway or access point, enabling seamless connectivity between LoRaWAN® IoT devices and network or cloud infrastructures.

This gateway offers robust in-building wireless coverage with various connectivity options, including Ethernet and optional 4G LTE Backhaul. It supports the LoRaWAN protocol, ensuring flexible integration depending on your specific model and configuration.

Part code	Description
RF-LW-HUB-E-BAC	Ethernet Only mPower/BACnet Programmable Access Point, 8-channel, 868 MHz w/external LoRa antenna and EU/GB Accessory Kit
RF-LW-HUB-EC-BAC	LTE Category 4 mPower/BACnet Programmable Access Point, 8-channel, 868 MHz w/external LoRa antenna and EU/GB Accessory Kit
RF-LW-HUB-E	Ethernet Only mPower Programmable Access Point w/external LoRa antenna and EU/GB Accessory Kit
RF-LW-HUB-EC	LTE Cat 4 mPower Programmable Access Point 8-channel, 868 MHz w/external LoRa antenna and EU/GB Accessory Kit
RF-LW-HUB-E-BAC-GL	Ethernet Only mPower/BACnet Programmable Access Point, 8-channel, 915 MHz w/external LoRa antenna and Global Accessory Kit
RF-LW-HUB-E-USAU	Ethernet Only mPower Programmable Access Point w/external LoRa antenna and US/AUS Accessory kit
RF-LW-HUB-EC-AU	LTE Cat 1 mPower Programmable Access Point 8-channel, AU915 MHz w/external LoRa antenna and AU Accessory Kit (Australia)

MODEL OPTIONS	
Ethernet Only Models	<ul style="list-style-type: none"> RF-LW-HUB-E-BAC RF-LW-HUB-E RF-LW-HUB-E-BAC-GL RF-LW-HUB-E-USAU
LTE Models	<ul style="list-style-type: none"> RF-LW-HUB-EC-BAC RF-LW-HUB-EC RF-LW-HUB-EC-AU
Accessory Kits	Include power supply, Ethernet cable, mounting bracket, and region-specific power blades, antennas.

INTERFACES	
DC Power	5VDC, 2.5mm barrel power jack
Ethernet	RJ-45 (10/100)
SIM Card Holder	3FF Micro SIM
Reset Button	Recessed switch
LoRa Antenna	Female Reverse Polarity SMA (on select models)
HARDWARE SPECIFICATIONS	
Processor	Cortex A7 with 512 MB SDRAM and 512 MB NAND flash memory, 568 MHz
Backhaul Options	Ethernet 10/100 BaseT (with LTE Category 4 for select models)
LoRaWAN	SX1303 baseband processor
LED Indicators	POWER, STATUS, LORA, CELL (select models)
Power	5 VDC, 2.5A
Dimensions	165 x 135 x 36 mm
Weight	1.5 kg
Chassis Type	PC-ABS
Mounting	Desk or wall mount
Operating Temperature	0°C to +70°C
Storage Temperature	-40°C to +85°C
Humidity	20% to 90%, non-condensing
QUALITY & COMPLIANCE	
Certified Regions	
LoRaWAN	Certified in Australia/New Zealand, Canada, European Union, United Kingdom & United States.
Cellular	Certified in Canada, European Union, United Kingdom & United States.
EMC Compliance	
Regions Covered	Australia/New Zealand, Canada, European Union, United Kingdom & United States.
Standards	Compliance with standards such as CISPR 32, EN 301-489, and FCC Part 15.
LoRaWAN Specifications	
Sensitivity	-141dBm
Frequency Bands	<ul style="list-style-type: none"> US915, AU915, AS923: 902-928 MHz, up to 30 dBm EIRP EU868, IN868: 863-870 MHz, up to 27 dBm EIRP
Channel Plan	8 channels with support for multiple spreading factors (SF5-SF12)
CELLULAR WAN SPECIFICATIONS	
Technology	4G LTE Category 4, with 3G HSPA+ fallback
Frequency Bands	
North America	4G (B2, B4, B5, B12, B13), 3G (B2, B4, B5)
Europe/UK	4G (B1, B3, B7, B8, B20, B28A), 3G (B1, B8), 2G (B3, B8)
Data Rates	Up to 150 Mbps downlink, 50 Mbps uplink
SIM Card	3FF Micro SIM
MNO Approvals	PTCRB, AT&T, Verizon, GCF, and others
SOFTWARE SPECIFICATIONS	
Operating System	mPower Edge Intelligence (Yocto-based Linux)
Languages Supported	Python, C, C++, JavaScript, Node.js
Security Features	Secure Boot, signed firmware, VPN support, MAC filtering, firewall rules, user access control
Management Tools	MultiTech DeviceHQ, SNMP, LDAP, configuration restore
Connectivity	LoRa Network Server, LoRa Packet Forwarder, LoRaWAN MQTT application

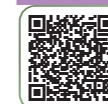
Data sheets online: www.sontay.com

Gateway's

SORA Gateways unify LoRaWAN sensors and building systems, enabling secure integration and scalable remote oversight.



SORA Gateway Bridge



KEY BENEFITS

The Bridge provides enterprise-grade security:

- TLS encryption for all device-to-cloud communication
- No open inbound ports on the customer network
- Certificate-based authentication
- AWS-hosted, fully managed platform
- Compliance with EU RED V2 cybersecurity requirements
- GSM modem can be disabled on request

This ensures safe adoption of wireless technology within corporate IT and operational networks.

Part code	Description
RF-LW-HUB-EU868-100	SORA Hub 100 Points European Version
RF-LW-HUB-EU868-5000	SORA Hub 5000 Points European Version
Aerial extension for SORA Hub	
RF-LW-HUB-ANT-868	Antenna Extension for superior range & coverage
RF-AERIAL-PM0.75	Aerial Extension c/w Bulk Head Fitting 0.75 Meter
RF-AERIAL-PM2	Aerial Extension c/w Bulk Head Fitting 2 Meter
RF-AERIAL-PM5	Aerial Extension c/w Bulk Head Fitting 5 Meter

SORA Tower



FEATURES

- The Light-BMS functionality – dashboards, alarms, schedules and automation delivered via the cloud.
- Unified integration – converts LoRaWAN sensor data into BACnet/IP, Modbus TCP or MQTT.
- Scalable architecture – supports high device counts across larger or multi-building estates.
- Remote oversight – configure, monitor and diagnose sites centrally with minimal engineer visits.
- Secure and managed – encrypted communication, AWS-hosted platform, certificate authentication.
- Low-disruption deployment – wireless sensing eliminates cabling, containment and invasive works.

Data sheets online: www.sontay.com

Simple, scalable integration of LoRaWAN devices into any BMS. The Sontay Bridge delivers seamless, open-protocol integration of Sontay's LoRaWAN sensors into any modern BMS. Designed for rapid deployment and high interoperability, the Bridge converts all connected LoRaWAN points into BACnet/IP, Modbus TCP or MQTT, making it an ideal solution for retrofits, upgrades, and multi-building estates. With local data processing, advanced security, and zero ongoing licence costs, the Sontay Bridge provides a robust foundation for long-term IoT and BMS expansion.

EFFORTLESS BMS INTEGRATION

- The Bridge connects LoRaWAN sensors directly into your BMS using BACnet/IP, Modbus TCP or MQTT. All datapoints are auto-mapped and presented cleanly, reducing engineering time and allowing LoRaWAN devices to slot straight into existing control architectures with minimal effort.

LONG-RANGE WIRELESS COVERAGE

- When paired with Sontay LoRaWAN sensors, the Bridge provides strong indoor penetration across multi-floor and multi-block estates. LoRaWAN's long-range performance overcomes solid ceilings, risers, basements and extended layouts, making it ideal for offices, healthcare, education, heritage buildings and live sites.

LOW-POWER, LOW-MAINTENANCE SENSORS

- LoRaWAN devices operate on ultra-low power, enabling multi-year battery life. This provides a maintenance-light sensing network across HVAC, IAQ, occupancy, leak detection, metering and environmental monitoring. Fewer callouts, less disruption, and lower lifecycle cost.

SCALABLE AND FLEXIBLE ARCHITECTURE

- Each Sontay Bridge can handle thousands of datapoints and can be expanded easily as building needs evolve. New sensors can be added in seconds, and the network grows without additional cabling or structural changes. Perfect for phased rollouts, portfolio-wide adoption and future IoT requirements.

A cloud-enabled, light-BMS platform for scalable LoRaWAN and multi-protocol integration.

The Sontay Tower is a powerful, cloud-connected device that brings LoRaWAN sensors and building systems together into a single, easy-to-manage environment. Positioned as a light BMS, it offers centralised visibility, remote management, dashboards, alarms and basic automation without the complexity of a full supervisory system. This makes it ideal for estates that need enhanced oversight and IoT capability without undertaking a full BMS upgrade.

With support for BACnet/IP, Modbus TCP and MQTT outputs, the Tower integrates seamlessly with existing control architectures while enabling remote configuration, historical data logging, and multi-building supervision via the Cloud. Its long-range LoRaWAN connectivity makes it well suited to distributed estates, campuses and hard-to-reach areas where wiring is impractical.

Part code	Description
RF-LW-TOWER-1YRSUB	SORA Hub 1 year 4G data subscription
RF-LW-TOWER-3YRSUB	SORA Hub 3 year 4G data subscription
RF-LW-TOWER-5YRSUB	SORA Hub 5 year 4G data subscription
RF-LW-TOWEREU868-100	SORA Hub 100 points EU + 1 year subscription
RF-LW-TOWEREU868-5000	SORA Hub 5000 points EU + 1 year subscription

Smart Sensing



smart



SMART COMMUNICATION SENSORS

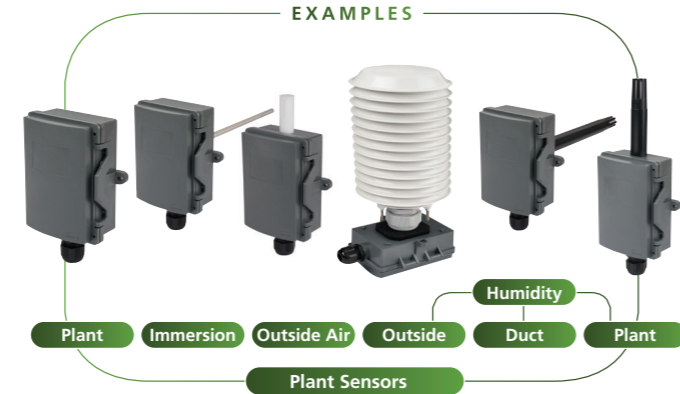


- Save time and cost on installation through smart connectivity.
- Our Smart Communications sensors offer total environmental sensing in one single space sensors.
- Installation of all sensors is over one twisted pair cable and configuration is simple.
- All option outputs are available via BACnet MS/TP or Modbus RTU.

SC-S Smart Communication Space Sensor



SC Smart Communication Plant Sensor



SPECIFICATION

Supply voltage	24Vac/dc ±10%
Communication	RS-485 (EIA-485) Protocol selectable via DIP switch
BACnet MS/TP	9k6 to 78k8bps or auto baud rate detection
Modbus RTU	9k6 to 57k6bps Selectable parity and stop bit configuration

Measurement Ranges

T:	-20°C to +110 units (°C or °F), 5 pre-set ranges plus one user configurable range
RH:	0 to 100% RH
CO ₂ :	0 to 2,000 or 5,000ppm CO ₂ (user selectable)
CO:	0 to 500ppm CO
IAQ:	0 to 1,000ppb TVOC
LL:	0 to 10,000lux
PIR:	PIR occupancy status, off delay 0-900 seconds user configurable

User Interfaces	SP: Set point adjuster 0-100%, user configurable
	FS: Fan speed slider 5-stages Off, Lo, Med, Hi, Auto
	MS: Momentary switch button Active/Inactive
	LCD Display: Showing T, RH, CO ₂ or IAQ (if fitted)

Input options	AI: Analogue Input 0-10Vdc linear or NTC thermistor (10K3A1) sensor
	DI: VFC or pulse count, user selectable

Output options	AO: 3x Analogue Output 0-10V, configurable
	DO: 2x Digital Output, 24Vac Triac

Environmental	Housing: 0 to +50°C
	0 to 95% non-condensing

Housing	Material: ABS (flame retardant)
	Colour: Polished white finish
	Dimensions: 115 x 85 x 30mm
	Protection: IP30

SPECIFICATION

Supply voltage	24Vac/dc ±10%
Communication	RS-485 (EIA-485) Protocol selectable via DIP switch
BACnet MS/TP	9k6 to 78k8bps or auto baud rate detection
Modbus RTU	9k6 to 57k6bps Selectable parity and stop bit configuration

Measurement Ranges

Temp.:	-20°C to +110 units (°C or °F) 5 pre-set ranges plus one user configurable range
RH:	0 to 100% RH
CO ₂ :	0 to 2,000 or 5,000ppm CO ₂ (user selectable)
CO:	0 to 500ppm CO
IAQ:	0 to 1,000ppb TVOC
LL:	0 to 10,000lux
PIR:	PIR occupancy status, off delay 0-900 seconds user configurable

User Interfaces	LCD Display: Showing T, RH, CO ₂ or IAQ (if fitted)
	LED: "Traffic light" LED user configurable for any sensing variable or network value

Input options	AI: Analogue Input 0-10Vdc linear or NTC thermistor (10K3A1) sensor
	DI: VFC or pulse count, user selectable

Output options	AO: 3x Analogue Output 0-10V, configurable
	DO: 2x Digital Output, 24Vac Triac

Environmental	Housing: -30 to +60°C
	0 to 95% non-condensing

Housing	Material: PC
	(Halogen Free Flame Retardant, UV stabilized)

	Colour: Basalt grey
	Dimensions: 125 x 105 x 85mm
	Protection: IP65

Data sheets online: www.sontay.com

Data sheets online: www.sontay.com



SC-S Smart Communication Space Sensor



SC Smart Communication Plant Sensor

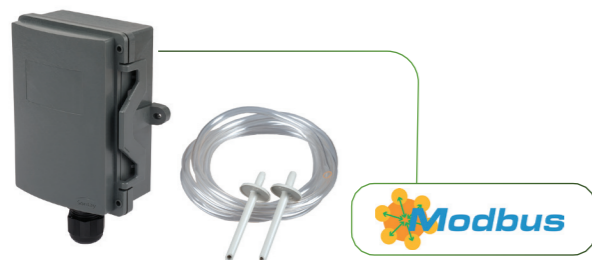
Part code	Description
SPACE SENSOR	
SC - S -	x x x x x x Space Temperature
	Configuration Sensing Options RH/CO ₂
0	- none
1	- RH
2	- CO ₂
3	- CO ₂ and Traffic Light LED
4	- RH and CO ₂
5	- RH, CO ₂ and Traffic Light LED
	Configuration Sensing Options CO/IAQ
0	- none
1	- CO
2	- IAQ
3	- CO and IAQ
	Configuration User Indication
0	- none
1	- LCD Display
2	- Light Level Sensor
3	- PIR Sensor
4	- Light Level and PIR Sensor
	Configuration Interface Options
0	- none
1	- SP
2	- MS
4	- SP and MS
5	- SP and FS
6	- FS and MS
7	- SP, MS and FS
	Configuration Digital Outputs
0	- none
1	- 2x DO
	Configuration Analogue Outputs
0	- none
1	- 3x AO
DUCT SENSOR	
SC - D -	x x x x 0 x x Duct Temperature and RH
	Configuration Sensing Options CO ₂
0	- none
1	- CO ₂
2	- CO ₂ and Traffic Light LED
	Configuration Sensing Options CO/IAQ
0	- none
1	- CO
2	- IAQ
3	- CO and IAQ
	Configuration User Indication
0	- none
1	- LCD Display
	Configuration Digital Outputs
0	- none
1	- 2x DO
	Configuration Analogue Outputs
0	- none
1	- 3x AO

Part code	Description
IMMERSION / DUCT TEMPERATURE	
SC - I -	0 0 x 0 x x Immersion/Duct Temperature
	Configuration User Indication
0	- none
1	- LCD Display
	Configuration Digital Outputs
0	- none
1	- 2x DO
	Configuration Analogue Outputs
0	- none
1	- 3x AO
PLANT SENSOR	
SC - W -	x 0 x 0 x x Plant Temperature
	Configuration Sensing Options RH
0	- none
1	- RH
	Configuration User Indication
0	- none
1	- LCD Display
2	- Light Level Sensor
3	- PIR Sensor
4	- Light Level and PIR Sensor
	Configuration Digital Outputs
0	- none
1	- 2x DO
	Configuration Analogue Outputs
0	- none
1	- 3x AO
OUTSIDE WALL SENSOR (RAD SHIELD)	
SC - O -	x 0 x 0 x x Outside Temperature (Radiation Shield)
	Configuration Sensing RH
0	- none
1	- RH
	Configuration User Indication
0	- none
1	- LCD Display
2	- Light Level Sensor *
3	- PIR sensor *
4	- Light Level and PIR Sensor *
	Configuration Digital Outputs
0	- none
1	- 2x DO
	Configuration Analogue Outputs
0	- none
1	- 3x AO

Note: Not available for RH configurations.

Other Sensor types are available, please contact us.

PA-DPT-MOD Air DP Sensor



SPECIFICATION

Power Supply	24Vac/dc ±10%
Measurement ranges	-250 to 2500Pa
Accuracy	<125Pa = 1% + ±2Pa >125Pa = 1% + ±Pa
Pressure Connections	Push fit for 6mm ID tubing
Housing	Material: PC (Halogen Free Flame Retardant, UV stabilized) Dimensions: 125 x 105 x 85mm
Environmental	Housing -40°C to 70°C 0 to 95% RH non-condensing Media: -20 to 50°C
Protection	IP65
Weight	300g

Note: A duct fixing kit (DFK) is supplied with the sensor, consisting of 2m and 5mm i/d plastic tubing, 2 x pitot tubes and 4 x fixing screws.

Part code	Description
PA-DPT-MOD	Air DP 1% Acc -250 to 2500Pa ModBus
Accessories	
DFK	Duct fixing kit
TEE	Tee Piece Air Pressure 6mm Pack of 10
PITOT	Aluminium pitot tube (pair)
PA-TUBE-CLEAR	PVC tube 8mm o/d x 1.5mm wall, 30m reel
PA-TUBE-RED	PVC tube 8mm o/d x 1.5mm wall, 30m reel
PA-TUBE-BLUE	PVC tube 8mm o/d x 1.5mm wall, 30m reel

The PA-DPT-MOD differential pressure transmitter is ideal for measuring filter conditions, as well as many other applications in ventilation/air conditioning systems in buildings, laboratory's and clean rooms (air and non-corrosive gases).

FEATURES

- Duct fixing kit included
- Snap-fit cover

SC-FS-IOT Fieldserver BACnet Internet of Things Gateway



SPECIFICATION

Power	12-24Vdc, 240mA at 12V
Communication	Serial RS-485, galvanic isolation Ethernet: 10/100BaseT, MDIX, DHCP Wifi: 802.11 b/g/n Cellular: 3G and GPS
Ambient	Temperature -40 to +75°C Humidity 5 to 90% RH non condensing
Dimensions	102 x 68 x 28mm
Weight	200g

FEATURES

- Eliminate all custom engineering development time and expense
- Register gateways through SMC's tenant based IoT Cloud Platform
- Monitor and control devices
- Generate cloud-based notifications/alerts via SMS and/or emails to keep users informed as soon as events occur
- Retrieve 30 days of data stored in the gateway by viewing the dashboard or download as csv, JSON or RESTful API

The BACnet Internet of Things Gateway offers all you would expect from a high end Explorer product and more. It not only automatically discovers BACnet IP and BACnet MS/TP networks, but with Monitor View and Historian features, device data points can be precisely tracked and logged for analysis. Additionally it also acts as a Wifi Access Point for remote access from any mobile device without user restrictions. Cellular data (SIM card required) is an option.

Part code	Description
SC-FS-IOT-BAC	BACnet Internet of Things Gateway
SC-FS-IOT-BAC-W	BACnet Internet of Things Gateway (WiFi)
SC-FS-IOT-BAC-C	BACnet Internet of Things Gateway (WiFi and cellular)

SC-FS-ROUTER-BAC Fieldserver BACnet Router



SPECIFICATION

Power	9-30Vdc or 12-24Vac, 240mA at 12V 12-24Vdc, 240mA at 12V (-BACW)
Ambient	Temperature -40 to +75°C Relative Humidity 5 to 90% RH non condensing
Communication	Serial RS-485, galvanic isolation Baud rate 4k8, 9k6, 19k2, 38k4, 57k6, 115k2 Ethernet: 10/100BaseT, MDIX, DHCP Wifi (-BACW) only: 802.11 b/g/n
Dimensions	115 x 74 x 41mm 102 x 68 x 28mm
Weight	200g

- Routing between BACnet MS/TP (RS-485) and BACnet IP (Ethernet)
- Available in single port (32 devices) or dual port (64 devices).
- Easy installation with DeviceFind™, one page configuration via webbrowser and device discovery button
- SMC Cloud connects your device to the cloud, allowing remote access for diagnostics, monitoring, alarming & configuration
- Wifi connectivity (-BACW) and BACnet Explorer for easy commissioning

Part code	Description
SC-FS-ROUTER-BAC2	Fieldserver BACnet Router (Dual Port)
SC-FS-ROUTER-BACW	Fieldserver Wifi BACnet Router (Single Port)

SC-FS-EZ Fieldserver EZ Gateways into BACnet/Modbus



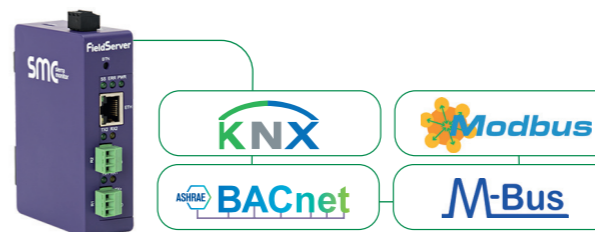
SPECIFICATION

Power	9-30Vdc or 12-24Vac.
Ambient	Temperature -40 to +75°C Relative Humidity 5 to 90% RH non condensing
Communication	Serial RS-485, galvanic isolation Baud rate 4k8, 9k6, 19k2, 38k4, 57k6, 115k2 Ethernet: 10/100BaseT, MDIX, DHCP
Dimensions	115 x 74 x 41mm
Weight	200g

- **M-Bus:** M-Bus Explorer and Device Profiles App allow each M-Bus device to be auto-discovered, templatised and presented to quickly configure new M-Bus devices. This makes each corresponding M-Bus device into a virtual BACnet device within the EZ Gateway, thereby providing granular visibility and control over each device via BACnet.
- **Modbus:** Supports virtual nodes allowing each Modbus device connected to a single EZ Gateway to be seen as a separate device on the BACnet network. The webinterface is used to configure the local network settings and create profiles for Modbus devices.
- **KNX:** The EZ Gateways KNX interface is compatible with all KNX certified products. Easy data mapping via built in KNX data map graphical user interface and import of XML and ESF files.

Part code	Description
SC-FS-EZ1-MBUS-MOD-BAC	M-Bus to Modbus/BACnet 16 devices, 500 points
SC-FS-EZ2-MBUS-MOD-BAC	M-Bus to Modbus/BACnet 32 devices, 1000 points
SC-FS-EZ3-MBUS-MOD-BAC	M-Bus to Modbus/BACnet, 64 devices, 5000 points
SC-FS-EZ3-MOD-BAC	Modbus to BACnet, 500 points
SC-FS-EZ4-MOD-BAC	Modbus to BACnet, 1000 points
SC-FS-EZ1-KNX-BAC	KNX to BACnet, 500 points
SC-FS-EZ2-KNX-BAC	KNX to BACnet, 1000 points

SC-FS-QS-2x10-F Quickserver 2xx0 Series Full Function Gateways



SPECIFICATION

Power	9-30Vdc or 24Vac, 250mA at 12Vdc
Ambient	Temperature: -20 to +70°C Relative Humidity: 10-95% non condensing
Communication	2x RS-485, galvanic isolated Baud rate: 9k6, 19k2, 34k8, 57k6, 76k8 Ethernet: 10/100 Base T, MDIX, DHCP
Installation	DIN rail mount
Dimensions	102 x 28 x 68mm
Weight	200g

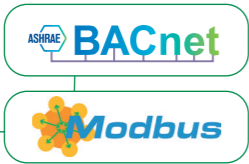
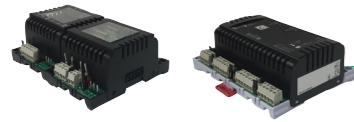
- The Quickserver is a high performance, fully configurable, cost effective Building and Industrial Automation gateway for integrators to easily interface devices to networks.
- The Quickserver FS-QS-2XX0-F series: is available at four different point capacities. Each Quickserver is preloaded with 140 different drivers, such as Modbus, BACnet, SNMP, EtherNet/IP and many more.
- See our webpage for the complete list. www.sontay.com

Part code	Description
SC-FS-QS-2010-F	Quickserver 2xx0 Series Full Function, 250 points
SC-FS-QS-2210-F	Quickserver 2xx0 Series Full Function, 500 points
SC-FS-QS-2310-F	Quickserver 2xx0 Series Full Function, 3000 points
SC-FS-QS-2410-F	Quickserver 2xx0 Series Full Function, 5000 points

Data sheets online: www.sontay.com

Data sheets online: www.sontay.com

SC-IO-10x Smart Remote IO Modules



Sontay's new range of mini Smart IO Modules offer extension to any BACnet or Modbus network when you require additional inputs & outputs. They allow easy integration of non-intelligent inputs and outputs to BACnet or Modbus network protocols.

FEATURES

- SC-IO-100: 8 Universal Inputs
- SC-IO-102: 4 Universal Inputs - 2 Binary Outputs - 2 Analogue Outputs
- Manual output override switches on SC-IO-102
- DIN-rail mounting
- LED status for power & inputs/outputs

COMMUNICATION

- Selectable BACnet or Modbus communication
- MAC address set via DIP switch or network
- Copy & broadcast configuration to other SC-IO-10x modules (BACnet only)

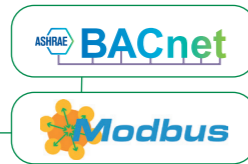
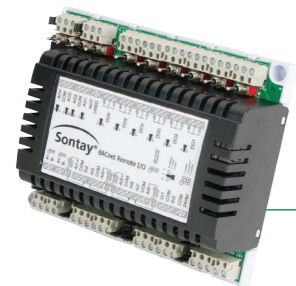
SPECIFICATION

Supply voltage	24Vac/dc	
Supply current	3VA (175mA @ 24Vac)	
Inputs (12 bits resolution)	SC-IO-100: 8 Universal inputs, 0-10Vdc, Thermistor, on/off or 4-20mA	
	SC-IO-102: 4 Universal inputs: 0-10Vdc, pulsed signal (20mA drive), on/off or 4-20mA	
	SC-IO-102: 2 Universal outputs: 0-10Vdc, pulsed signal (20mA drive) or on/off	
Outputs (12 bits resolution)	SC-IO-102: 2 Binary outputs: Normally open/closed or direct/reverse independent common per relay 5A resistive	
	BACnet	MS/TP, 9600, 19200, 38400 or 57600 Selectable parity & stop bits
	Modbus	RTU slave, 9600, 19200, 38400 or 57600 Selectable parity & stop bits No parity, 2 stop bit Even parity, 1 stop bit Odd parity, 1 stop bit
Ambient	Temperature: 0 to 50°C RH: 5 to 95% RH. non-condensing	
Housing	Material: ABS Dimensions: 81 x 125 x 58mm	
Protection	IP30	
Weight	200g	

Part code	Description
SC-IO-100	Smart Communication IO Module 8 U/I
SC-IO-102	Smart Communication IO Module 4 U/I, 2 U/O & 2 B/O



SC-IO-24 Smart I/O Modules



The Sontay Smart Communication I/O-Modules extend your system when your application requires additional inputs and outputs on a physical controller. Integrating 20 IO points to the BMS provides a simple and cost effective expansion of a new or existing controller.

FEATURES

- 8 Universal and 2 Digital Inputs
- 2 Universal, 2 Analogue and 6 Digital Outputs
- Manual override of the outputs, all supEVSised via the network
- Automatic baud rate detection and automatic device instance configuration (BACnet)
- Connects to any Modbus master controller
- LED for power up and input/output status
- DIN rail mounting

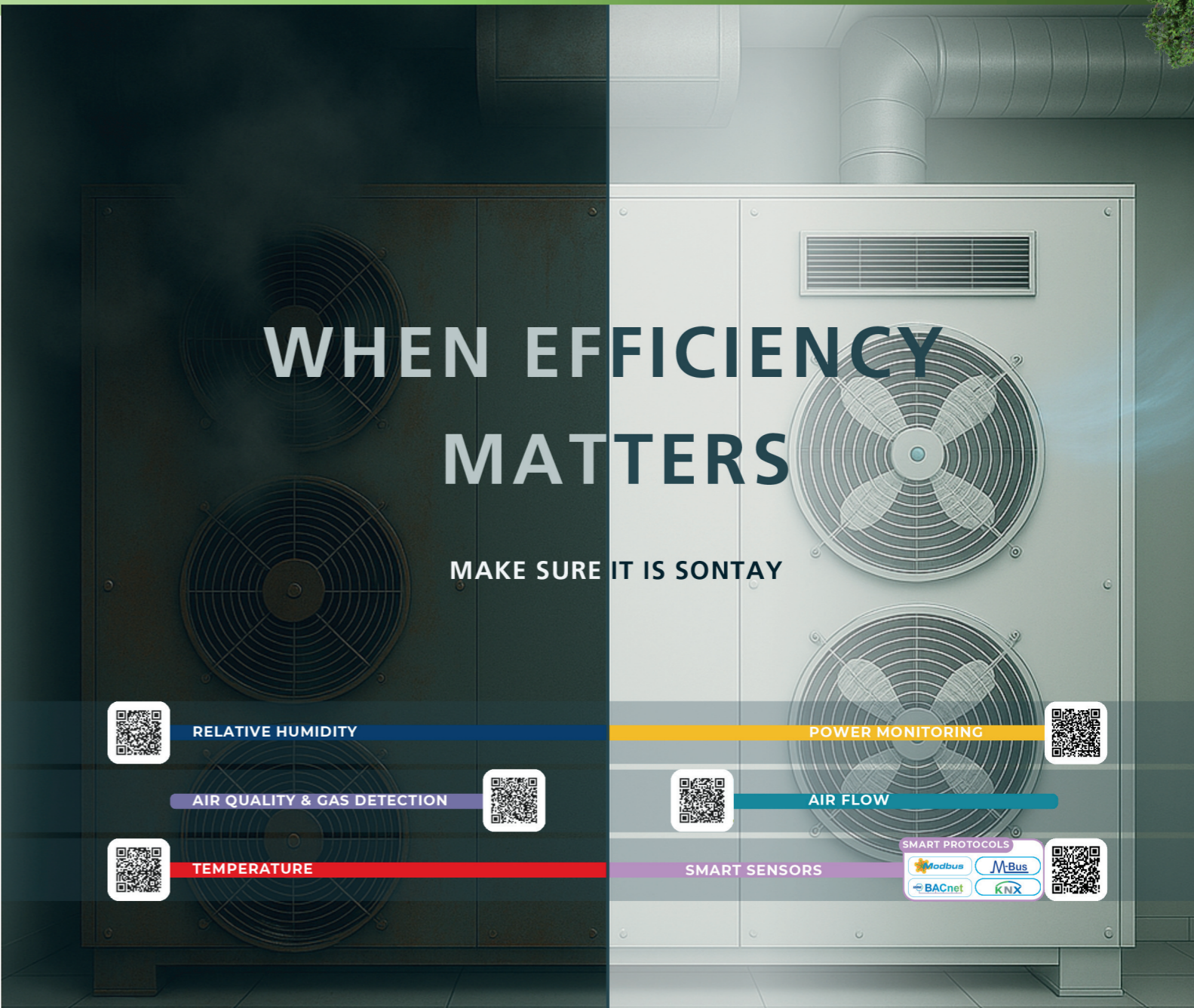
COMMUNICATION

- Selectable communication protocol via Dip switch: BACnet MS/TP or Modbus RTU
- Copy & broadcast configuration to other Sontay SC-IO-24 via BACnet
- Selectable MAC address via DIP switches or via network

SPECIFICATION

Supply voltage	24Vac/dc ±10%
Supply current	8VA (0mA @ 24Vac)
Inputs	8 x Universal (12-bit resolution) 0-10Vdc, Thermistor On/off (VFC), 4-20mA, 2 x Digital (12-bit resolution) Normally open/closed or direct/reverse
	2 x Universal (12-bit resolution) 0-10Vdc, Pulsed signal (20mA drive), On/off, 4-20mA, 2 x Analogue (12-bit resolution) 0-10Vdc, 6 x Digital relay, Normally open/closed, Independent common per relay, 5A resistive
Outputs	MS/TP (BAS-C): 9k6, 19k2, 38k4 or 76k8 bps or auto baud rate detection
BACnet	RTU Slave @ 9k6, 19k2, 38k4 or 57k6, Selectable parity and stop bit conf, No parity, 2 stop bit, Even parity, 1 stop bit, Odd parity, 1 stop bit
Modbus	Temperature: 0 to 50°C RH: 5 to 95% RH. non-condensing
Ambient	Material: ABS Dimensions: 160 x 126 x 57mm
Housing	IP30
Protection	400g
Weight	

Part code	Description
SC-IO-24	Smart Communication IO Module BACnet / ModBus



WHEN EFFICIENCY MATTERS

MAKE SURE IT IS SONTAY

RELATIVE HUMIDITY

POWER MONITORING

AIR QUALITY & GAS DETECTION

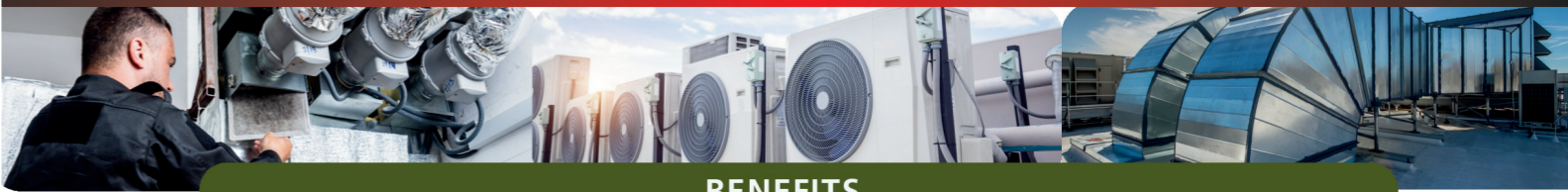
AIR FLOW

TEMPERATURE

SMART SENSORS

SMART PROTOCOLS

RELATIVE HUMIDITY & TEMPERATURE SENSORS



BENEFITS

- AIR QUALITY**

 - Monitor CO₂ and humidity in real time
 - Prevent over-ventilation & improve comfort

EFFICIENCY

 - Control temperature and pressure precisely
 - Reduce energy waste and optimise performance

PRECISION

 - Maintain stable supply air conditions
 - Ensure comfort, performance, & compliance

INTEGRATION

 - Connect seamlessly with BMS or IoT platforms
 - Supports BACnet, Modbus, KNX & LoRaWAN