S-SERIES: MODBUS ADAPTER

Introduction

The Modbus adapter is an IoT controller applied for remote access and data acquisition from Modbus RS485 devices via LoRaWAN® networks. It's the ideal solution to pull information from third-party devices so the monitoring information may be shared on SoniCloud.

It can read up to 16 Modbus devices and support Modbus transparent transmission between servers and devices as a Modbus to LoRaWAN® converter.

This adapter supports multiple trigger conditions and actions which work autonomously – even during network interruption.
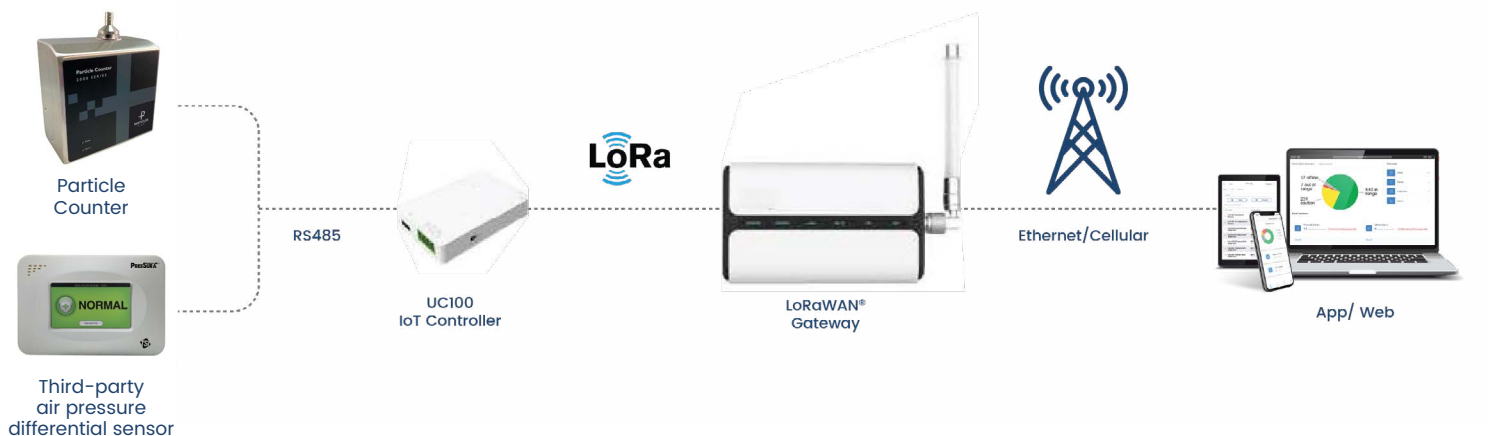
Combined with the SoniCloud application, it can monitor virtually any remote asset via the monitoring platform.

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The Modbus adapter is an IoT device leveraged for remote access and data acquisition from Modbus RS485 devices via LoRaWAN ® networks.

Combined with the SoniCloud application, it can monitor virtually any remote asset via the monitoring platform. The solution is used widely to capture data from third-party sensors, including applications for particle counters in clean rooms and legacy air pressure differential sensors.

Application Example

Particle Counter

Third-party air pressure differential sensor

RS485

UC100 IoT Controller

LoRa

LoRaWAN® Gateway

Ethernet/Cellular

App/ Web

Features

- Experience real-time monitoring with range and efficiency
- Our proprietary LoRaWAN® technology, SoniLink, ensures secure and reliable wireless connectivity. Experience real-time monitoring with range or efficiency
- Compact in size, installation is a breeze
- Instantly compatible with AWS Cloud-based SoniCloud Monitoring
- Tailored alerts and alarms via phone call, text, email and push notification

Specifications

Wireless Transmission	
Technology	LoRaWAN®
Antenna	Internal Antenna
Transmission Power	22dBm
Data Interface	
Port	1 × RS485
Connector	3.5 mm Terminal Block
Protocol	Modbus RTU, support reading 16 register values
Physical Characteristics	
Power Connector	3.5 mm Terminal Block
Power Supply	1. 5-24 VDC by Terminal Block 2. 5 VDC by Type-C Port
Power Consumption	< 0.5 W
Material & Color	PC+ABS, White
Ingress Protection	IP30
Operating Temperature	-20°C ~ 60°C (-4 to +140°F)
Relative Humidity	0% ~ 95% (non-condensing)
Dimensions	70 × 45 × 13 mm (2.75 × 1.77 × 0.51 in)
Installation	Desktop, Wall Mounting