

# Introducing the SecFlow-1v-LoRa Secure IIoT Gateway with LoRaWAN and Edge Computing!

# Ruggedized, multiservice and compact – meet RAD's new SecFlow-1v-LoRa!

SecFlow-1v-LoRa is best-in-class, secure industrial IoT gateway with Edge computing that leverages license-free LoRa LPWAN technology for water and power utilities, smart cities, transportation and many other verticals. It collects data from LoRa sensors and meters and securely delivers it to cloud servers via fiber, Ethernet, 3G/ LTE cellular or unlicensed microwave radio.

LoRaWAN eliminates wiring, is easy to deploy and does not need any licenses. It reduces the energy consumption of connected objects while giving them more than 10 years of autonomy by exchanging small data at low speed.



## SecFlow-1v-LoRa

Ruggedized Multiservice Gateway for LoRa networks

# Specifications

### **LoRaWAN MODEM**

433MHz/868MHz/915MHz bands

SX1301 base band processor emulating 49 x LoRa demodulators, 10 parallel demodulation paths

8 uplinks channel and 1 downlink channel

Maximum range: Urban: 2~4km / Suburb: 5~10km, Open area: 15km

### LoRaWAN SERVER (optional)

As per specification v1.0.03

### **ETHERNET INTERFACES**

**GbE Port:** 4 x 10/100/1G BASE-T,

RJ-45 connector **SFP:** 1 x 100/1000FX

**POE:** 4 GbE copper with up to 2x30W or 4x15W PoE (optional), 1x60W. **Max** 

### **SERIAL INTERFACES**

2 x RS-232/RS485 Ports Isolated/non-isolated

### **CELLULAR MODEM**

Dual SIM cellular modem for HSPA+/ EVDO or LTE networks

FOTA (Firmware upgrade Over the Air)

### **NETWORKING**

L3 IPSec VPN SCADA gateway for IEC101/104, Modbus RTU/TCP and DNP3

### **ROUTER**

Static routing, OSPFv2, BGP, VRF, IPv4, NAT. NAT-T

### **MANAGEMENT**

Control Port Interface: RS-232

### **Management Options**

CLI with password-protected access Web-based interface using HTTP

or HTTPS

### Tools

TFTP/SFTP Multiuser TACACS+

### TIMING

Local time setting SNTP

### **SECURITY**

Stateful Firewall

### **IPsec**

AES128 and AES256 GCM encryption OpenVPN client PKI with X.509 certification IKEv1, IKEv2, SHA2

### **OPERATING TEMPERATURE**

-40 to 65C (-40 to 149F)

### **POWER SUPPLY**

Dual feed DC



