

SmartSwarm 243

Industrial LoRa Private Gateway



Features

- Long-range wide area IoT gateway
- LoRa private protocol for closed system applications
- Ethernet and I/O ports for connecting a wide range of field assets with a DIN rail or wall mounting design
- Optional solar or battery power input for low power consumption

Introduction

The SmartSwarm 243 is a high-performance LoRa gateway with reliable connectivity for industrial environments and closed system applications. With support for both MQTT but and VPN tunneling, its hardware and software flexibility brings rich features to edge intelligent systems and the full integrity of Advantech's industrial IoT architecture.

Specifications

WSN Support

- **Standard** LoRa private
- **Frequency** 868/915 MHz
- **ANT Connector** SMA female connector x 1

LAN Interface

- **Ethernet** 10/100 Mbps, auto MDI/MDIX
- **Connector** RJ45 x 1
- **Protection** 1.5-kV built-in magnetic isolation protection

Digital I/O

- **Port Type** 1 x digital input on voltage: 2.7 ~ 36 V_{DC}
- **Port Connector** 4-way Molex mini-fit connector

General

- **LED Indicators** PWR, DAT, WAN, ETH
- **Reboot Trigger** Reset button

Software

- **Network and Routing** DHCP server, NAT/PAT, VRRP, dynamic DNS client, DNS proxy, VLAN, QoS, DMVPN, NTP client/server, IGMP, BGP, OSPF, RIP, SMTP, SMTPS, SNMP v1/v2c/v3, backup routers, PPP, PPPoE, SSL, port forwarding, host port routing, Ethernet bridging
- **Configuration** SSH, web browser
- **Network Security** HTTPS, SSH, VPN tunneling, SFTP, DMZ, firewall (IP, MAC address, and inbound/outbound port filtering)
- **VPN Tunneling** Open VPN client/server and P2P, L2TP, PPTP, GRE, EasyVPN, IPSec with IKEv1 and IKEv2

Mechanics

- **Dimensions (W x H x D)** 150 x 30 x 83 mm (5.9" x 1.18" x 3.27")
- **Mounting** DIN rail, wall
- **Weight** 187 g
- **Enclosure Rating** IP30

Power Requirements

- **Power Input** 9 ~ 36 V_{DC}
- **Power Connector** 4-way Molex mini-fit connector
- **Power Consumption** 2.1/4.8/40 mW (average/peak/sleep mode)

Environment

- **Operating Temperature** -40 ~ 75 °C
- **Storage Temperature** -40 ~ 85 °C
- **Operating Humidity** 10 ~ 95% RH

Regulatory Approvals

- **EMC** EN61000-4-2, Level 3
EN61000-4-3, Level 3
EN61000-4-4, Level 3
EN61000-4-5, Level 3
EN61000-4-6, Level 3
EN61000-4-12, Level 3
EN61000-4-11, voltage dip: 70%
- **Shock** IEC60068-2-27
- **Free Fall** IEC60068-2-32
- **Vibration** IEC60068-2-6

Ordering Information

- **BB-SG30600115-43** LoRa Gateway