IEEE 802.11 b/g Industrial Wireless Outdoor Bridge



Features

High Performance Wireless Technology

- Wireless LAN IEEE 802.11b/g compliant
- Compliant with IEEE 802.3, IEEE 802.3u, IEEE 802.11b, IEEE 802.11q
- Supports radio modules 2.4~2.472 GHz (802.11b/g)
- Supports Super G to transmit data rate up to 108 Mbps
- Supports point to point and point to multi-point bridging function
- Flexible four operating modes: Access Point, Bridge, AP Client and Repeater
- Strong Network Security with 64/128/152-bit WEP encryption and WPA function Supports DFS/TPC (Dynamic Frequency Selection and Transmit Power Control)
- ▼ Flexible Software configuration through WEB GUI interface for easy management



Robust Weatherproof IP-68 housing protection

Supports Power Over Ethernet Design

Supports power input of 48 VDC

Robust Industrial Design

Reliable Power Design

Overview

The Falcon series FWO-712 is a 2.4 GHz IEEE 802.11 b/g compliant Wireless Outdoor Access Point available for Industrial Ethernet applications. With innovative technology design, FWO-712 provides 108 Mbps (Super G mode) high data rate for outdoor environment which is faster than xDSL connection speed. It links two or more separate networks to create a single expanded LAN network cost effectively and efficiently. The robust IP-68 housing protects the device from harsh outdoor environment – weatherproof, waterproof, dustproof. FWO-712 supports four different operation modes namely Access Point, Bridge, AP Client and Repeater. In addition, the built-in Power over Ethernet design reduces the cost of power cables installation and provides future proof investment. To secure information, it comes with WEP encryption and WAP function. With of these advanced features, FWO-712 is a powerful Outdoor solution produced for Industrial applications.

Hardware Specifications

Interface

Antenna Type: Reverse N-type female External high gain antenna (optional)

Access Point Interface:

Auto sensing MDI/MDI-X Ethernet 10/100Base-TX:RJ-45

Flash: 2 MB SD RAM: 8 MB

Power Requirements

Power Input: DC 12V ± 5%; 2A (Max.); Supply by PoE

AC adapter AC 100V ~ 240V Output power: 100 mW

Power consumption: stand-by: 2.88 watts / Transmit: 3.6 watts

Physical

Dimensions: IP-68 standard, 231.15 mm (W) x 185 mm (H) x 62.5 mm (D)

Weight: 4.01 kg

Installation: Panel or Pole mount or desktop Accessories: Bracket + Power over Ethernet adapter

Environmental

Operating Temp: -30 to 70°C (-22 to 158°F) Storage Temp: $-40 \text{ to } 85^{\circ}\text{C} \left(-40 \text{ to } 185^{\circ}\text{F} \right)$

Operating Humidity: 5%~90% RH (Non-condensing)

Technology Specifications

Operating Type:

AP/Bridge/Wireless Client/Repeater

IEEE 802.11b/g; IEEE 802.3; IEEE 802.3u; IEEE 802.3af

Radio Frequency Type:

DSSS (Direct Sequence Spread Spectrum) OFDM (Orthogonal Frequency Division Multiplexing)

Modulation:

IEEE 802.11b: CCK, DQPSK, DBPSK

IEEE 802.11g: OFDM with BPSK, QPSK, 16QAM, 64QAM

Frequency Band: America/FCC: 2.412~2.462 GHz (11 channels) Europe CE/ETSI: 2.412~2.472 GHz (13 channels)

Transmission Power:

802.11b/g: 20dBm

Transmission Rate:

IEEE 802.11b: 1/2/5.5/11

IEEE 802.11g: 6/9/12/18/24/36/48/54/108 Mbps

Data Rate:

Super G: Up to 108 Mbps 802.11g: Up to 54 Mbps 802.11b: Up to 11 Mbps

Sensitivity:

IEEE 802.11b: -86dBm @ 11 Mbps, PER<8% IEEE 802.11g: -72dBm @ 54 Mbps, PER<10%

Regulatory Approvals

Safety: CE / EN60950-1 EMI: FCC Part 15

EMC: EN301 489-1, EN301 489-17

Radio: EN300 328 WI-FI compliant: YES **Shock:** IFC60068-2-27 Vibration: IEC60068-2-6 Free Fall: IEC60068-2-32 Class 1 DIV 2: Pending *

DNV: Pending *

Environmental: WEEE, RoHS

MTBF: 425,000 hrs based on Mil-Hdbk-217F, GB

Warranty: 5 years

Management Specifications

Software:

Site survey DHCP Cliént Suppressed SSID

Wireless access control by MAC address

(deny or accept) WPA Support (WPA personal and enterprise) Web-based configuration via popular browser (MS IE, Netscape ...)

Windows "Locator" program to help find IP

in DHCP client mode

Firmware upgrade and configuration backup via Web

Reset to default by Web-UI Supports SNMP v1/v2c

Security:

64/128/152-bit WEP encryption Wi-Fi protected Access(WPA)