

IEEE 802.11 a/b/g Industrial Wireless Outdoor AP/Bridge



FWO-711

Features

- High Performance Wireless Technology
 - ✓ Wireless LAN IEEE 802.11a/b/g compliant
 - ✓ Compliant with IEEE 802.3, IEEE 802.3u, IEEE 802.3af IEEE 802.11a, IEEE 802.11b, IEEE 802.11g
 - ✓ Supports radio modules 2.412~2.472 GHz (802.11b/g) & 5.15~5.825 GHz (802.11a)
 - ✓ 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/WPA2 function
 - ✓ Supports DFS/TPC (Dynamic Frequency Selection and Transmit Power Control)
 - ✓ Flexible Software configuration through WEB GUI interface for easy management
- Robust Industrial Design
 - ✓ Robust Weatherproof IP-68 housing protection
- Reliable Power Design
 - ✓ Supports Power Over Ethernet Design
 - ✓ Supports power input of 48 VDC



Overview

The Falcon series FWO-711 is a 5.8 GHz IEEE 802.11 a/b/g compliant Wireless Outdoor Access Point available for Industrial Ethernet applications. With innovative technology design, FWO-711 provides 108 Mbps (Super A, 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-711 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 WPA/WPA2 function. With of these advanced features, FWO-711 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: 8 MB

SDRAM: 32 MB

Technology Specifications

Operating Type:

AP/Bridge/Wireless Client/Repeater

Standard:

IEEE 802.11a/b/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 802.11a: OFDM with BPSK, QPSK, 16QAM, 64QAM
IEEE 802.11b: CCK, DQPSK, DBPSK
IEEE 802.11g: OFDM with BPSK, QPSK, 16QAM, 64QAM

Frequency Band:

IEEE 802.11a: 5.15~5.25 GHz (lower band)
5.25~5.35 GHz (middle band)
5.725~5.825 GHz (hi-band)
America/FCC: 2.412~2.462 GHz (11 channels)
Europe CE/ETSI: 2.412~2.472 GHz (13 channels)

Transmission Power: 802.11a/b/g : 20dBm

Transmission Rate:

IEEE 802.11a : 6/9/12/18/24/36/48/54/108 Mbps
IEEE 802.11b : 1/2/5.5/11
IEEE 802.11g : 6/9/12/18/24/36/48/54/108 Mbps

Data Rate:

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

Sensitivity:

IEEE 802.11a : -70dBm @ 54 Mbps, PER<10%
IEEE 802.11b : -86dBm @ 11 Mbps, PER<8%
IEEE 802.11g : -72dBm @ 54 Mbps, PER<10%

Power Requirements

Power Input: DC 48V ± 5% ; 0.4A (Max.); Supply by PoE (Approved by ED's PoE series products); PoE injector supports AC 100V~240V

Output power: 100 mW

Power consumption: stand-by: 4.32 watts / Transmit: 11.04 watts

Physical

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

Weight: 4.05 kgs

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 to 85°C (-40~185°F)

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

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: IEC60068-2-27

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 Client
Suppressed SSID
Support DFS and TPC
Support VLAN
Support Multiple 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
Rogue AP Detection
Reset to default by Web UI
SNMP V2.0

Security:

64/128/152-bit WEP encryption
Wi-Fi protected Access (WPA and WPA2)