



FWI-701

## Features

### High Performance Network Switching Technology

- ✓ Wireless LAN IEEE 802.11 b/g compliant
- ✓ Compliant with IEEE 802.3, IEEE 802.3u, IEEE 802.11b, IEEE 802.11g
- ✓ Supports radio modules 2.412-2.472 GHz
- ✓ 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 Industrial Design

- ✓ Robust Weatherproof IP-67 housing protection

### Reliable Power Design

- ✓ Supports Power Over Ethernet Design
- ✓ Supports power input of 12 VDC



## Overview

The Falcon series FWI-701 is a 2.4 GHz IEEE 802.11 b/g compliant Wireless Outdoor Access Point available for Industrial Ethernet applications. With innovative technology design, FWI-701 provides 180 Mbps (Super G mode) high data rate for outdoor environment. It links two or more separate networks to create a single expanded LAN network cost effectively and efficiently. The robust IP-67 housing protects the device from harsh outdoor environment – weatherproof, waterproof, dustproof. A built-in 12 dBi panel antenna is included for flexibility in installation. FWI-701 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 function. With of these advanced features, FWI-701 is a powerful Outdoor CPE solution produced for Industrial applications.

## Hardware Specifications

### Interface

**Antenna Type:** Integrated 12 dBi flat panel antenna

### Access Point Interface:

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

**Flash:** 2 MB

**SDRAM:** 8 MB

### Power Requirements

**Power Input:** DC 12V ± 5%, 1.5A(Max), Supply by PoE ,  
PoE injector support AC100-240V

**Output power:** 100 mW

**Power consumption:** stand-by: 2.76 watts / Transmit: 3.60 watts

### Physical

**Dimensions:** IP-67 standard, 106 mm (W) x 186 mm (H) x 61 mm (D)

**Weight:** 2.11 kgs

**Installation:** Pole mount or desktop

**Accessories:** Cables + Bracket + Power over Ethernet adapter

### Environmental

**Operating Temp:** -10 to 70°C (14 to 158°F)

**Storage Temp:** -40 to 85°C (14 to 158°F)

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

## Technology Specifications

### Operating Type:

AP/Bridge/Wireless Client/Repeater

### Standard:

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

### 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:

IEEE802.11b: 1/2/5.5/11 Mbps  
IEEE 802.11g: 6/9/12/18/24/36/48/54/108 Mbps(Super G)

### Data Rate:

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

### Sensitivity:

-86dBm @ 11 Mbps, PER< 8%; -64dBm @ 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:** 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  
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)