

IRONPOINT 250 802.11a/b/g WIRELESS ACCESS POINT



KEY HIGHLIGHTS

- ▶ Dual band access point for high-performance access and industry leading configuration flexibility with unsurpassed functionality and scalability
- ▶ Flexible management options using built-in management or centralized management platform with IronView® Network Manager
- ▶ Robust secure authentication options supported by 802.11i, WPA, WPA2 with various EAP types including EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-SIM
- ▶ Advanced enterprise features—Automatic channel selection and transmit power control, fast roaming, enhanced QoS, and 802.3af Power-over-Ethernet (PoE) support
- ▶ Wi-Fi compatibility ensures interoperability with all Wi-Fi certified laptops, phones, PDAs, and other mobile wireless devices

HIGH-PERFORMANCE, DUAL-BAND ACCESS POINT FOR ENTERPRISE-CLASS WIRELESS DEPLOYMENT

Overview

The IronPoint™ 250 stand-alone access point from Foundry Networks delivers a cost-effective, full featured, secure wireless solution. The dual band, high performance 802.11a/b/g 2.4 GHz and 5 GHz radios with omnidirectional antennas offer configuration flexibility and scalability for small to medium enterprises.

For customers planning new installations or adding capacity and coverage to existing wireless LANs (WLANs), the IronPoint 250 is the easiest-to-deploy access point in its class. The IronPoint 250 enables plug-and-play deployment using Foundry's automatic discovery and configuration (ADC) protocol.

The IronPoint 250 can be managed through the built-in Web interface (HTTP, HTTPS), CLI, SNMP (v2/v3) or Telnet for small wireless networks requiring only a few access points. And to serve medium enterprise networks where scalability and manageability are critical, Foundry's IronView Network Manager can be employed to centrally manage the access points.

In addition, the IronPoint 250 provides deployment options through three powering alternatives: locally using the AC/DC power supply, by IEEE 802.3af PoE switches or through optional inline power injectors.

Customers that demand the most from their WLANs can combine IronPoint 250 access points with Foundry's Wireless Enabled FastIron Edge Switches (FES). This powerful duo provides exceptional security, mobility and unmatched scalability. This robust solution includes sophisticated, next-generation features, and it provides ironclad security and reduced cost of ownership for medium enterprises and hot spot providers.

Target Applications

Offering robust wireless performance, extensive security features and flexible management options, the IP250 is well-suited for a broad range of small to medium-sized environments including:

- ▶ Branch offices
- ▶ Schools, universities
- ▶ Small to medium enterprises

Advanced Capabilities

SECURITY

The IronPoint 250 access point provides a rich set of enterprise class features to help secure and enable seamless wireless integration with the wired LAN.

- ▶ Leading-edge and standards-based authentication and data privacy for strong enterprise-class security
- ▶ Support for 802.1x authentication, Preshared Key authentication, MAC Address authentication, WPA2 (AES-CCMP), WPA (TKIP), Dynamic WEP(64, 128 and 152 bit), Static WEP(64, 128 and 152 bit)
- ▶ Support for EAP-TLS, EAP-TTLS, EAP-MD5, EAP-TTLS/MSCHAPv2, PEAPv0-MSCHAPv2, PEAPv1-MSCHAPv2, PEAPv1/EAP-GTC, EAP-SIM

PERFORMANCE AND QUALITY

Foundry Networks is a leader in high performance, feature rich and cost effective networking solutions with many years of solid experience in secure data networks. Foundry Networks membership in the Wi-Fi Alliance ensures maximum compatibility with other Wi-Fi Alliance approved 802.11 products.

- ▶ Support for 802.11a 5GHz 54-Mbps, 802.11a Turbo 5GHz 108-Mbps, 802.11b 2.4GHz 11-Mbps, 802.11g 2.4 GHz 54-Mbps
- ▶ External antenna support for both 802.11a and 802.11b/g radios
- ▶ Flexible management options with built-in management or centralized management platform with IronView Network Manager, industry standard CLI, Web GUI, SSH v2, and SNMP v1/2/3

SEAMLESS ENTERPRISE DEPLOYMENTS

The IronPoint™ 250 AP integrates seamlessly with Foundry's industry leading IEEE 802.3 af PoE switches in existing or new networks infrastructures supporting PoE edge devices.

- ▶ Advanced enterprise features: Automatic channel selection and transmit power control, enhanced QoS, 802.3af PoE support
- ▶ Rapid handoff with IAPP IEEE 802.11f for seamless Layer 2 roaming
- ▶ Universal global support for multi-country radio frequency and channel configuration
- ▶ Wi-Fi compatibility ensures interoperability with all Wi-Fi compatible laptops, handhelds, PDAs, and other mobile wireless devices

Technical Specifications

AUTHENTICATION FEATURES

- Open/Share Authentication
- 802.1X Authentication
- EAP-TLS, EAP-TTLS, EAP-MD5, EAP-TTLS/MSCHAPv2, PEAPv0-MSCHAPv2, PEAPv1-MSCHAPv2, PEAPv1/EAP-GTC, EAP-SIM
- 3rd Party RADIUS Support
- Local MAC Address Authentication
- RADIUS MAC Address Authentication
- Active Directory and LDAP Support

SECURITY FEATURES

- Static WEP Support (64-bit, 128-bit, 152-bit)
- 802.1x Dynamic WEP Support (Unique Session Keys/ Dynamic Key Rotation)
- Broadcast and Session Key Refresh
- 802.1x Re-authentication Refresh
- WPA/WPA2 (TKIP/AES-CCMP) with Pre-shared Keys (WPA/WPA2 Personal)
- WPA/WPA2 (TKIP/AES-CCMP) with 802.1x Support (WPA/WPA2 Enterprise)
- 802.11i AES HW Compliant
- 802.1x Dynamic VLAN Policies
- Native VLAN per SSID
- Management VLAN
- Intrusion Detection & Lockout
- 802.1x AP Authentication To Switch
- Wireless Client to Wireless Client Filtering
- Wireless Side Local Management Filtering
- Ethernet Type Filtering
- SSID Broadcast Suppression
- Physical AP Locking Mechanism

AP AND NETWORK FEATURES

- Multi-Country Support
- Mounting Bracket for Wall, Ceiling, and Tabletop
- Integrated AP Locking Mechanism
- LEDs For Status, Link, Radio a, Radio b/g
- Auto-sensing 10/100BASE-T PoE Port
- Power Over Ethernet (PoE) Support-802.3af
- 802.11a, 802.11b, 802.11g Standards
- 802.11a Turbo Mode
- Simultaneous Dual Radio Support 2.4-GHz and 5-GHz
- Integrated Antenna Support For 802.11a/b/g
- External Antenna Support for 802.11a/b/g
- Plenum Rated UL 2043 AP Housing
- Automatic Channel Assignment
- Adjustable Power Levels
- AP Load Balancing
- Maximum Speed Setting
- Broadcast/Multicast Rate Limiting
- VLAN Support-64 VLANs
- Fragmentation Threshold Setting
- Idle Timeout (set at 30 minutes)
- Layer 2 Roaming-802.11f IAPP

MANAGEMENT FEATURES

- CLI Console
- Telnet Support
- Disable Telnet Support
- SSH v2 Support
- HTTP/HTTPS Support
- Disable HTTP/HTTPS Support
- User Definable HTTP/HTTPS Port Number
- SNMP Support
- SNMP v2c, v3 Support
- Syslog RFC 3164 Support
- Management VLAN Support
- Event Logging
- MIB Support
- Dual Image Support on AP
- Centralized AP & Configuration Management
- IronView Network Manager

REPORTING FEATURES

- User/Device Access Logging and Reporting
- AP Usage Reports
- External Syslog Support
- Security Alert Support

HIGH AVAILABILITY FEATURES

- Centralized Configuration Management & Storage
- CPU Protection

WIRELESS DATA ENCRYPTION

- RC4 64-bit/128-bit/152-bit Wired Equivalent Privacy (WEP)
- Temporal Key Integrity Protocol (TKIP)
- Advanced Encryption Standard (AES)
- Pairwise Master Key Security Association (PMKSA)
- WPA2 mixed-mode AES/TKIP

WIRELESS NETWORK ADMISSION CONTROL

- Shared key authentication
- Pre-shared key authentication (PSK)
- EAP-TLS
- EAP-TTLS/MSCHAPv2
- PEAPv0-MSCHAPv2
- PEAPv1-MSCHAPv2
- PEAPv1/EAP-GTC
- EAP-SIM
- WPA2 pre-authentication
- Intrusion detection and lockout
- 802.1x Dynamic VLAN assignment

WIRELESS QUALITY OF SERVICE

- 802.1p tag mapping to priority queue
- Source/Destination MAC-address mapping to priority queue
- Ethertype mapping to priority queue
- Spectralink voice prioritization
- AP Load Balancing

WIRELESS LAYER 2 FILTERING

- MAC address filter
- Local station bridging filter
- Station management filter
- Ethertype filter

VIRTUAL AP FEATURES

- 4 uniquely configurable Virtual APs per radio
- Multi SSID
- Multi BSSID
- Default VLAN
- Encryption
- Network admission control
- Hidden SSID
- Association timeout interval
- Authentication timeout interval
- Maximum associated clients
- WPA2 PMKSA
- Broadcast key refresh rate
- 802.1x re-authentication interval rate

RADIO SUPPORT

- Simultaneous Dual Radio Support 2.4GHz and 5GHz
- 802.11g protected mode
- Automatic channel select
- Automatic Tx power selection
- Maximum station data rate

- Multicast data rate
- Antenna type
- Antenna diversity
- Fragmentation length
- Beacon interval
- Data beacon rate (DTIM)
- RTS threshold
- Preamble mode
- Multicast/broadcast rate limiting

ETHERNET SUPPORT

- Auto-sensing 10/100Base-T
- Power Over Ethernet (PoE) Support—802.3af
- Ethernet Type Filtering
- 802.1p/Q VLAN tagging and priority
- Multicast/broadcast rate limiting

ANTENNAS

- 5 GHz: Integrated 5 dBi omni-directional
- 2.4 GHz: Integrated 2.5 dBi omni-directional
- RP-SMA connectors for optional external antennas

NETWORK MANAGEMENT

- IronView Network Manager (INM), central management
- Integrated web-based graphical user interface
- Industry standard command line interface (CLI)
- SNMPv1, v2c, v3
- MIB I and MIB II
- Console port
- Telnet, SSHv2
- HTTP, HTTPS
- FTP, TFTP
- XML
- DHCP client
- SNTP
- Syslog
- Dual Image Support on AP
- Management ACL

WAN INTERFACE

- PPPoE

ELEMENT SECURITY OPTIONS

- Secure Shell SSHv2
- HTTPS
- Username/password (challenge and response)
- Bi-level access mode (standard and EXEC level)

IEEE COMPLIANCE

- 802.11a 5 GHz 54 Mbps OFDM
- 802.11b 2.4 GHz 11 Mbps DSSS/CCK
- 802.11f IAPP L2 roaming
- 802.11g 2.4 GHz 54 Mbps DSS/CCK/OFDM
- 802.11h DFS/TPC
- 802.11i AES hardware
- 802.1p/Q VLAN tagging and priority
- 802.1x wireless station authentication with dynamic VLAN assignment and Ethernet interface authentication (supplicant)
- 802.3 10BaseT
- 802.3u 100Base-Tx
- 802.3af Power over Ethernet

RFC COMPLIANCES

- RFC 791 IP
- RFC 792 ICMP
- RFC 793 TCP
- RFC 783 TFTP
- RFC 826 ARP
- RFC 768 UDP
- RFC 894 IP over Ethernet
- RFC 1157 SNMPv1
- RFC 1215 SNMP generic traps

- RFC 1573 SNMP MIB II
- RFC 1905,1906 SNMPv2c
- RFC 2030 SNTP
- RFC 2068 HTTP
- RFC 2138 RADIUS
- RFC 3164 Syslog

SAFETY AGENCY APPROVALS

- IEC 60950-1:2001
- CAN/CSA C22.2 No. 60950-1-03 (1st ed.)
- UL 60950-1 (first edition)
- EN 60950-1:2001

RADIO APPROVALS

- 47 CFR Part 15, Subpart C (Section 15.247), Subpart E (Section 15.407)
- EN 300 328-1
- EN 300 328-2
- EN 301 893 V1.2.3 (2003-08)

EMI COMPLIANCES

- EN 301 489-1
- EN 301 489-17
- EN 55022
- EN 61000-3-2
- EN 61000-3-3
- EN 61000-4-2
- EN 61000-4-3
- EN 61000-4-4
- EN 61000-4-5
- EN 61000-4-6
- EN 55024:1998
- CISPR 22
- AS/NZS CISPR22
- FCC Part 15, Subpart B, Class B
- ICES-003:1997

ENVIRONMENTAL

- Operating temperature: 0° C to 50° C
- Storage temperature: -20° C to 70° C
- Relative humidity: 15% to 95% non-condensing

PHYSICAL DIMENSIONS

- 1.29 in (H) x 5.40 in (D) x 8.60 in (W)
- 3.27 cm (H) x 13.73 cm (D) x 21.83 cm (W)

WEIGHT

- 1.76 lbs
- 0.80 kg
- Mount Bracket: 0.65 lbs (0.29 kg)

RELIABILITY

- MTBF (estimated): 177,000 at 50 oC, 428,000 at 25 oC

POWER SUPPLY

- Input: 100 – 240 VAC, 50–60 Hz
- Output: 48 VDC, 0.38A
- Power consumption: 13 W max

POWER OVER ETHERNET

- 802.3af compliant class 0 device
- Input Voltage: 48 V, 0.27 A, 13 W max

WARRANTY

- 1-year hardware
- 90-day software

MOUNTING OPTIONS

- Plenum-rated UL 2043 housing
- Mounting bracket for wall or ceiling
- Kensington Security Slot

ROHS

- 6 of 6 Compliant

Ordering Information

PART NUMBER	DESCRIPTION
IP250-US	IronPoint 250 wireless access point for operation in United States. Includes: Console cable, CD-ROM with documentation, AC/DC power supply, wall and ceiling mounting kit, and US power cord.
IP250-TH	IronPoint 250 wireless access point for operation in Thailand. Includes: Console cable, CD-ROM with documentation, AC/DC power supply, wall and ceiling mounting kit, and US power cord. To request a different power cord, specify PCUK or PCEURO when ordering.
IP250-EC	IronPoint 250 wireless access point for operation in European Community. European Community countries are: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, U.K. Includes: Console cable, CD-ROM with documentation, AC/DC power supply, wall and ceiling mounting kit, and US power cord. To request a different power cord, specify PCUK or PCEURO when ordering.
IP-ACC-ANT3-50MC	2.4 GHz 802.11 b/g Ceiling Mount Omnidirectional Antenna (5.5 dBi)—3 foot pigtail and mounting hardware included
IP-ACC-ANT3-20HA	2.4 GHz 802.11 b/g Ceiling Mount Bidirectional Antenna (4 dBi)—½ foot pigtail and mounting hardware included
IP-ACC-ANT3-130P	2.4 GHz 802.11 b/g Directional Panel Antenna (13 dBi)—1 foot pigtail included. Mounting hardware sold separately
IP-ACC-MNT3-130P	Mounting hardware for IP-ACC-ANT3-130P antenna
IP-ACC-CBL3-1RPXSMA	1 foot antenna cable: RP-SMA male to RP-SMA female—Plenum rated
IP-ACC-CBL3-3RPXSMA	3 foot antenna cable: RP-SMA male to RP-SMA female—Plenum rated
IP-ACC-CBL3-10RPXSMA	10 foot antenna cable: RP-SMA male to RP-SMA female—Plenum rated



Foundry Networks, Inc.
Corporate Headquarters
4980 Great America Parkway
Santa Clara, CA 95054

U.S. and Canada Toll-free:
1-888-TURBOLAN (887-2652)
Tel: +1 408.207.1700
Fax: +1 408.207.1709

info@foundrynet.com
www.foundrynetworks.com

Although Foundry has attempted to provide accurate information in these materials, Foundry assumes no legal responsibility for the accuracy or completeness of the information. More specific information is available on request from Foundry. Please note that Foundry's product information does not constitute or contain any guarantee, warranty or legal binding representation, unless expressly identified as such in duly signed writing.

© 2007 Foundry Networks, Inc. All Rights Reserved. Foundry Networks, BigIron, NetIron, IronShield, IronView, IronWare, JetCore, JetScope, MetroLink, Terathon, TrafficWorks, Power of Performance and the 'Iron' family of marks are trademarks or registered trademarks of Foundry Networks, Inc. in the United States and other countries. sFlow is a registered trademark of InMon Corporation. All others are trademarks of their respective owners.