



# Access5830™

## 5.8 / 5.3 GHz

### Dual-Band Access Point



The Access5830™ Access Point (AP) is an enterprise class, 10 Mbps, direct sequence, spread spectrum wireless transceiver offering channels of operation in both the 5.8 and 5.3 GHz unlicensed bands. The Access5830 AP supports up to 500 subscriber units and includes an integrated antenna as well as a comprehensive set of management and deployment tools.

## Product Highlights

### • FLEXIBILITY

The Access5830 Access Point offers multiple channels of operation in both the license-exempt 5.8 GHz ISM and the 5.3 GHz U-NII bands. 20 MHz channels, coupled with dual polarity antennas, allow total co-location potential of up to 22 access points for a fully loaded cell site. Polarity and channel selection are software switchable.

### • SMARTPOLLING™ FEATURE

The Access5830 Access Point is equipped with SMARTPolling, a powerful prioritization scheme designed to ensure the highest quality of service to active bandwidth subscribers. SMARTPolling allows the AP to dynamically and adaptively poll each SU favoring subscribers that are engaged in passing traffic, guaranteeing the lowest latency for those users.

### • MANAGEABILITY TOOLS

The Access5830 AP offers a host of management tools including site survey, automatic power leveling, receiver threshold, RF link test, and many other features designed to allow network operators to quickly and efficiently deploy and manage their Access5830 network.

### • CONVENIENCE

The Access5830 Access Point provides multiple management interfaces including telnet, HTTP web browser, SNMP and FTP. Network operators can easily configure, manage, and monitor the AP from remote locations.

### • DURABILITY, EASE OF INSTALLATION

The Access5830 Access Point is housed in a ruggedized, weatherproof enclosure and is powered via Power-over-Ethernet (PoE) to ensure easy installation and quick deployment.

### • AFFORDABILITY

The Access5830 Access Point allows network operators to expand their networks through collocation of multiple access points without the need for additional hardware or software. Additional subscribers can be added to each AP for maximum density without sacrificing quality of service.

# Access5830™ Specifications

## ACCESS POINT

### SUBSCRIBER UNIT COMPATIBILITY/RANGE CHART

Part Number	Model	Antenna	Range / Fade Margin
M5800S-FSU	FOX5800 5.8 GHz	Integrated 15 dBi	4 miles / 10dB
M5800S-FSU-D	FOX5800-D 5.8 GHz	AD5800-25 dish 25 dBi	10 miles / 10 dB
M5300S-FSU	FOX5300 5.3 GHz	Integrated 15 dBi	2 miles / 10 dB
M5830S-SU	Access5830 Dual Band	Integrated 18 DBi	6 miles / 10 dB
M5830S-SU-EXT	Access5830 Dual Band External	AD5830-23-D 23 dBi panel	10 miles / 10dB
M5830S-SU-EXT	Access5830 Dual Band External	SPD3-5.2T 30 dBi dish*	18 miles / 12 dB

\* Available from Radiowaves ([www.radiowavesinc.com](http://www.radiowavesinc.com)) and Radiowaves distributors

### RADIO PARAMETERS

Frequency of Operation	High Band (ISM Band): 5725 MHz to 5850 MHz Low Band (U-NII Band): 5250 MHz to 5350 MHz
Channels	High Band (ISM Band): 6 non-overlapping channels Low Band (U-NII Band): 5 non-overlapping channels
AP Antenna Gain	14 dBi
AP Beamwidth	60° azimuth, 10° elevation
Modulation Format	Direct Sequence Spread Spectrum (DSSS) with RAKE
Certification/Compliance	FCC Part 15.247, 15.407
Receiver Sensitivity (1E10-6 BER)	1600 byte packets: -83 dBm, 64 byte packets: -87 dBm

### DATA AND OPERATIONAL PARAMETERS

Access Method	TDD with SmartPolling™
User Data Throughout	10 Mbps
Format	10/100 Base T
Network Protocols	All IEEE 802.3/802.3u compliant protocols
Configuration and Management	Telnet, SNMP, TFTP, HTTP
Upstream/Downstream Throughput	Dynamic, automatically adjusts to suit demand
Bandwidth Control	Committed Info Rate (CIR) and Maximum Info Rate (MIR) setting per subscriber unit

### PHYSICAL INTERFACES

Ethernet (via shielded RJ45)	10/100 BaseT, auto-sense, auto-negotiate
Serial (via RJ11)	9600 baud
Ethernet Packet	Up to 1600 byte long packets (supports VLAN/VPN pass through)

### POWER PARAMETERS

Power Method	Power-over-Ethernet (PoE) via DC voltage injected at PoE J-box
Voltage Input Limits into Radio	10.5 VDC – 24 VDC
Standard Power Supply	120 VAC to 24 VDC adapter
PoE Cat-5 Max Cable Length	300 feet on 24 AWG STP Cat-5 cable
Power	13.4 W

### PHYSICAL AND ENVIRONMENTAL

Radio Enclosure	All-weather, powder coated, cast aluminum with polycarbonate radome
Temperature Range	-40° to 60° C (-40° to 140° F)
NEMA Rating	NEMA 4
Radio Dimensions	12.5" x 8" x 2.75"
Radio Weight	4 lbs.
User Interfaces	RJ45 (shielded) and RJ11

Specifications are typical and subject to change without notice.