

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. It supports up to 500 subscriber units and includes a comprehensive set of management and deployment tools. The Access5830™ Access Point is available in two versions, one with an integrated antenna and one with an external antenna connector.

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. Eleven available channels, coupled with dual polarity antennas, allow maximum colocation potential for multiple access points. Polarity and channel selection are software switchable.

- **SMARTPOLLING™ FEATURE**

The Access5830 AP 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				
Access Point / Antenna	SU Part #	SU Model	SU Antenna, Gain	Range / Fade Margin
M5830S-AP-60 with 14 dBi integrated patch antenna	M5580S-FSU	Atlas FOX 5.8 GHz	Integrated, 8 dBi	3 miles / 10 dB
			External dish, AD5800-25, 25 dBi	13 miles / 13 dB
	M5800S-FSU	FOX5800 5.8 GHz	Integrated, 15 dBi	4 miles / 10dB
	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
				External patch, AD5830-23-D, 23 dBi
	M5830S-SU-EXT	Access5830 Dual Band External	External dish, SPD3-5.2T 30 dBi dish*	18 miles / 12 dB

Range chart for M5830S-AP-EXT dependent upon antenna selection.

* Available from Radiowaves (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
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
ANTENNA OPTIONS	
M5830S-AP-60	Integrated patch, 14 dBi, dual polarized, 60° x 10° beamwidth
M5830S-AP-EXT External Antenna Options (FCC Certified Models)	Sector antenna, 16 dBi, dual polarized, 90° x 8° beamwidth (Radiowaves part #SEC-55D-90-16) Sector antenna, 16 dBi, horizontally polarized, 120° x 8° beamwidth (Pacifi Wireless part #SAH57-120-16) Omni antenna, 12 dBi, vertically polarized, 360° x 7° beamwidth (Pacifi Wireless part #OD58)
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 Throughout	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.

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