



Access583A™

5.8 / 5.3 GHz

Dual-Band Access Point

FOR EXPORT ONLY. NOT FOR U.S.A.

The Access583A™ Access Point* (AP) is an enterprise class, 10 Mbps, direct sequence, spread spectrum wireless transceiver that offers channels of operation in both the 5.8 and 5.3 GHz unlicensed bands. The AP supports up to 500 subscriber units, offers robust interference rejection (ARQ[±]) and also includes an integrated antenna and a comprehensive set of management and deployment tools.

Product Highlights

• FLEXIBILITY

The Access583A 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 Access583A 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 Access583A Access Point 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 Access583A 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 Access583A 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 Access583A 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.

Wireless Connectivity IS Our Business

Access583A™ Specifications

ACCESS POINT**

SUBSCRIBER UNIT COMPATIBILITY/RANGE CHART

Model	Part Number	Antenna	Range / Fade Margin	
Atlas FOX 5.8 GHz	M5580M-FSU	Integrated 8 dBi	5 km / 10 dB	
FOX5800 5.8 GHz	M5800S-FSU	Integrated 15 dBi	6 km / 10 dB	
FOX5310 5.3 GHz††	M5310S-FSU	Integrated 15 dBi	7 km / 7 dB	
Access5830 Dual Band	M5830S-SU	Integrated 18 DBi	9 km / 10 dB (5.8 GHz)	8 km / 7 dB (5.3 GHz)
Access5830 Dual Band External	M5830S-SU-EXT	AD5830-23-D 23 dBi panel	16 km / 10 dB (5.8 GHz)	10 km / 10 dB (5.3 GHz)
Access5830 Dual Band External	M5830S-SU-EXT	SPD3-5.2T 30 dBi dish†	29 km / 12 dB (5.8 GHz)	22 km / 10 dB (5.3 GHz)

† Available from Radiowaves (www.radiowavesinc.com) and Radiowaves distributors

RADIO PARAMETERS

Frequency of Operation	High Band (ISM Band): 5.725 GHz to 5.850 GHz Low Band (U-NII Band): 5.250 GHz to 5.350 GHz
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: 87 dBm†
EIRP Max	+36 dBm High Band; +33 dBm Low Band

DATA AND OPERATIONAL PARAMETERS

Access Method	TDD with SmartPolling™
User Data Throughput	10 Mbps
Format	10/100 Base T
Network Protocols	All IEEE 802.3/802.3u compliant protocols
Interference Rejection	ARQ† (Automatic Retransmit reQuest)
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

ANTENNA PARAMETERS

Internal Antenna	Integrated 14 dBi 60° x 10° patch array dual polarized (HPOL/VPOL), software selectable
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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
Power Supply	230 VAC to 24 VDC Universal
PoE Cat-5 Max Cable Length	100 meters on 24 AWG STP Cat-5 cable
Power / Current Draw	575 mA (13.8 W); 1 Amp when heater is on (24 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

All specifications are typical and subject to change without notice.

†† Not licensed for use in the U.S.A. Legal regulations for wireless communications vary from region to region—users are responsible for complying with their region's regulations.

† ARQ available as a free firmware upgrade; must be loaded on AP and SU.