

Access5830™

5.8 / 5.3 GHz

Dual-Band Subscriber Unit



A full-featured, enterprise class customer premise radio, the Access5830™ Subscriber Unit offers dual-band flexibility, long range and three certified antenna options. The Access5830 Subscriber Unit works in conjunction with the Access5830 Access Point for point-to-multipoint deployments.

Product Highlights

- **FLEXIBILITY**

The Access5830 Subscriber Unit offers operators the flexibility of operating in either the license-exempt 5.8 GHz ISM or the 5.3 GHz U-NII bands. In addition, this robust subscriber unit (SU) provides a host of configuration options which are vital for interference mitigation including full control over operating channels, antenna polarizations, and receiver threshold settings.

- **MANAGEABILITY**

The Access5830 Subscriber Unit is fully manageable via the Ethernet or serial port, as well as over-the-air via the access point. The unit features an easy-to-use browser interface and a full command line interface. Useful tools such as site survey and RSSI aid in the deployment process.

- **SPEED**

The Access5830 Subscriber Unit efficiently delivers up to 10 Mbps throughput and utilizes patent pending SmartPolling™ algorithm.

- **LONG RANGE ANTENNA OPTIONS**

The Access5830 Subscriber Unit is available in two versions. The M5830-SU includes an integrated, dual polarized antenna which offers a six-mile range. The MS5830-SU-EXT includes two SMA antenna connectors, allowing the attachment of a variety of longer range antennas.

- **DURABILITY, EASE OF INSTALLATION**

The Access5830 Subscriber Unit has a ruggedized, weatherproof design and is powered via Power-over-Ethernet (PoE) to ensure easy installation and quick deployment.

- **SECURITY**

The Access5830 Subscriber Unit utilizes Direct Sequence Spread Spectrum technology, providing excellent range and immunity to interference. MAC authentication, coupled with transmission scrambling, provides a high degree of over-the-air security.




- **AFFORDABILITY**

The Access5830 Subscriber Unit offers robust features and unmatched flexibility at a competitive price.

Access5830™ Specifications

SUBSCRIBER UNIT

ANTENNA / RANGE CHART

Antenna Style	SU Model	Max Range from AP	Antenna Gain	Beamwidth	
				Azimuth	Elevation
 Internal Patch	M5830S-SU	6 miles (high band) (10 dB fade margin) 2 miles (low band)	18 dBi	18°	10°
 15" External Square Patch AD5830-23-DP	M5830S-SU-EXT	10 miles (10 dB fade margin)	24 dBi	9°	9°
 Radiowaves 3' Parabolic Antenna SPD3-5.2T*	M5830S-SU-EXT	18 miles (12 dB fade-margin)	30 dBi	4°	4°

* 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

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.

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