






# 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](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
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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