



# Access5830™ Subscriber Unit

5.8 GHz Broadband Wireless CPE



The Access5830™ Subscriber Unit (SU) is a full-featured, enterprise-class customer premise radio that offers long range, high capacity 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 the license-exempt 5.8 GHz ISM band. 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. It utilizes Trango's patented SMARTPolling™ algorithm, 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 efficiently favoring subscribers that are engaged in passing traffic, guaranteeing the lowest latency for those users.

### » 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.

Ultimate Wireless Connectivity

ANTENNA / RANGE CHART						
	Antenna Style	SU Model	Max Range from AP	Antenna Gain	Beamwidth	
					Azimuth	Elevation
	Internal Patch	M5830S-SU	6 miles (10 dB fade margin)	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

## Specifications

RADIO PARAMETERS	
Frequency of Operation	5725 MHz to 5850 MHz (ISM Band)
Channels	6 non-overlapping channels, software selectable
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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