



POINT-TO-MULTIPOINT

Access5830™ 5.8 GHz Subscriber Unit

Broadband Wireless CPE

POINT-TO-MULTIPOINT BROADBAND WIRELESS INTERNET ACCESS

The Access5830™ Subscriber Unit (SU) is a full-featured, enterprise-class customer premise equipment (CPE) radio that offers long range, high capacity and three certified antenna options operating in the license-exempt 5.8 GHz ISM band. The Access5830™ SU works in conjunction with the Access5830™ Access Point for high-speed broadband wireless Internet point-to-multipoint deployments.

Convenient Management & Configuration Features

- » Easily configure and manage via the Ethernet or serial port, as well as over-the-air via the access point
- » Remote & local management via Telnet, SNMP, TFTP, and HTTP
- » Site survey and RSSI aid in the deployment process

Durability, Ease of Installation

- » Fully weatherized outdoor units are designed for harsh outdoor environments and operate from -40° to +140° F
- » Powered using Power-over-Ethernet (PoE) ensuring ease of installation and quick deployment

Operational Flexibility

- » 6 non-overlapping channels, software selectable
- » Includes a host of configuration options which are vital for interference mitigation including full control over operating channels, antenna polarization, and receiver threshold settings.

Security

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

Highlights

- Up to 10 Mbps usable subscriber throughput
- Up to 18-mile range with external antenna
- Dual polarity antenna, software switchable
- 3 versatile certified antenna options
- Fully weatherized for outdoor deployments

Antenna Versatility

- » INT model features built-in dual-polarity panel antenna
- » EXT model features two connectors for external antenna
- » All models feature software-selectable antenna polarity (H/V)




Affordability

- » Additional SUs can be added to each AP for maximum density without sacrificing quality of service. The Access5830™ SU offers robust features and unmatched flexibility at a competitive price.

Patented SMARTPolling™

The Access5830™ SU 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 efficiently favoring subscribers that are engaged in passing traffic, guaranteeing the lowest latency for those users.

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

WWW.TRANGOSYS.COM

Trango Systems, Inc.

14118 Stowe, Suite B, Poway, CA 92064

Tel.: +1 (858) 391-0010 | Fax: +1 (858) 391-0020 | Email: sales@trangosys.com

