

RedMAX Base Station (AN-100U) System Specifications



System Capability:	LOS, Optical LOS, non LOS Cellular-based point-to-multipoint
RF Band:	3.3-3.5*; 3.4-3.6; and 3.6-3.8 GHz
Channel Size:	3.5 MHz, 7 MHz
RF Dynamic Range:	> 40 dB
Spectral Efficiency:	Up to 5 bps/Hz (over the air)
Over The Air Rate:	Up to 35 Mbps (7 MHz channel, rates depend on channel size)
Ethernet Data Rate:	Up to 23 Mbps (7 MHz channel)
Latency:	6-18 msec (depends on channel size, OFDM frame duration)
Maximum Tx Power:	+23 dBm across all modulation/coding levels (region specific)
Rx Sensitivity:	Better than -98 dBm @ BPSK 1/2 (based on BER of 1x10 ⁻⁶)
IF Cable:	Maximum length up to 984 ft (300 m) using Redline recommended high-grade IF cable
Network Attributes:	Transparent bridge 802.1Q, TOS/DSCP and L2/L3 address, traffic classification DHCP client, client pass-through
Modulation/Coding Rates:	Auto-select modulation: BPSK, QPSK, 16 QAM, 64 QAM Auto-select coding: 1/2, 2/3, 3/4
Over the Air Encryption:	DES, 3DES
Synchronization:	Input for external 1 PPS GPS dock signal
MAC:	802.16-2004 compliant PMP 802.16-2004 packet convergence sub-layer mode TDMA Access
Range:	Over 28 mi (40 km) LOS; 12mi (20 km) PMP Over 2 mi (3 km) non LOS
Duplex Technique:	TDD (time division duplex) HD-FDD (half duplex frequency division duplex)
Wireless Transmission (PHY):	256 FFT Orthogonal Frequency Division Multiplexing (OFDM) (Orthogonal Frequency Division Multiplexing)
Network Connections:	Standard: 10/100 Ethernet (RJ-45)
System Configuration:	HTTP (Web) Interface, SNMP CU via Telnet and Local Console
Network Management:	SNMP, standard and proprietary MIBs Full management by RedMAX Management Suite (RMS)
Power Requirements:	Auto-sensing 110/220/240 VAC 50/60 Hz Auto-sensing 18-72 VDC, 80 W
Redundant Power:	Optional dual AC or dual DC power supply (dual cord) with automatic fail-over
Compliance:	EMC: EN 301 489-1, EN 301 489-4, EN 55022/CISPR 22 RF: EN 302 326, Industry Canada: RSS-192, FCC: Parts 90 & 15** Safety: IEC 60950-1, UL 60950-1
Operating Temperature:	IDU: 0 C to 40 C ODU: -40 C to 60 C
Dimensions	17 x 12 x 1.75 in (431.8 x 304.8 x 44.45 mm)
Weight:	5.5 lb (2.5 kg)
Humidity:	Up to 90% non-condensing