

RADIO SPECIFICATIONS	
Frequency Range	70 MHz to 1 GHz
Channel Sizes	12.5 kHz to 10 MHz
Tx Power	Up to 100 watts @ antenna port
Rx Sensitivity	As low as -126 dBm
Waveform	OFDMA
Modulation	QPSK, 16-QAM, 64-QAM
FEC in Downlink Direction	Convolutional coding (CC) with rates 1/2, 2/3, and 3/4
FEC in Uplink Direction	Convolutional coding (CC) with rates 1/2, 2/3, 3/4, and 5/6
Duplex Method	TDD
Topology	Point-to-Multipoint, Direct Peer-to-Peer
Air Interface Protocol	Band AMC 1x6 as per IEEE 802.16t for channel bandwidth > 12.5 kHz
Modulation Coding Scheme Selection	Dynamically adjusted
QOS	Best effort, real-time polling service
CONNECTORS / INTERFACES	
DC Input	Phoenix 1828249 plug
Grounding Post	10x32 thread screw
Console	RJ45 Cisco serial
Serial Data	RJ45 RS-232 / RS-449
Ethernet	2 X RJ45 (10/100 Mb)
Antenna Port RF	Type N female connector (50Ω)
GPS	SMA jack female connector
LCD Display	16x2 backlit

PHYSICAL CHARACTERISTICS	
DC Power Source	48 VDC ± 25%, 350W
Construction	5053 AL, gray powder coat finish
Packaging	19" 2U rackmount
Dimensions	19" x 3.5" x 16" (483mm x 89mm x 407mm)
Weight	15 lbs 14 oz (7.2 kg)
Operating Temp	-40°C to +70°C
Cooling	Forced air (front to back)
SECURITY FEATURES	
AES-256 traffic encryption	
Three-way handshake Over the Air Rekeying (OTAR)	
EAP-TLS-based authentication with X.509 Certificate and RSA-4096 public key encryption	
Hardware-based secure boot at the root of the "Chain of Trust"	
NIST-certified hardware random number generator	
Memory protection and access rights limitation for security robustness	
Trusted updates: authenticated and validated upgrades and configuration changes	
Security patch management	
Secured SNMPv3 remote management	
SSHv2 local management	
Security events monitoring,, audit ready	
COMPLIANCE	
IEEE 802.16t, IEEE 1613, Class 1 Division 2	