

# Gen3 5GHz Downlink Radio Specifications

INTERFACE	
Ethernet Interface	Ethernet 10/100 Base-T (RJ-45) (2 interfaces)
Wired LAN protocol	IEEE 802.3 (CSMA/CD)
Wireless Interface	Standard-N Male with 29dBi dish (5.8 GHz) or integrated 18dBi panel (5.25 – 5.85GHz)
Modes	Bridge (layer 2) or Router (layer 3)
Watchdog	OS Hardware, POS Watchdog for remote power cycle

RADIO CHARACTERISTICS	
Frequency Channels	5.25-5.35 GHz; 5.47-5.725 GHz; 5.725-5.85 GHz
Channel Width	Standard 20MHz; variable from 8MHz to 20MHz WIMAX mode
Modulation Technique	OFDM (QAM64,QAM16,QPSK,BPSK)
Media Access Protocol	802.11 with outdoor rate control and timing

OUTPUT POWER	
Output power	5.25-5.35 GHz (12dBm); 5.47-5.725 GHz (12dBm); 5.725-5.85 GHz (29dBm)
FCC certification	Class A certification, Part 15.247 ISM, UNII. Radio certified up to 30dBm at 5.8GHz with 29.2dBi dish. FCC ID: G3DL10
Receiver Sensitivity	54Mbps (-68dBm) 48Mbps (-71dBm) 36Mbps (-75dBm) 24Mbps (-80dBm) 18Mbps(-82dBm) 12Mbps(-85dBm)9Mbps(-88dBm) 6Mbps (-92dBm)
TX Power settings	Adjustment in +/- 1dBm increments
Noise Floor	-96dBm ; Noise floor reporting within +/- 1dBm

POWER	
Voltage	27V DC Version 5 Board
Interfaces	Optional Power over Ethernet, DPN Power over Serial
Power over Serial	Heartbeat serial watchdog with AC, Fuse, Lid, Battery Monitoring and Reporting to NMS

MANAGEMENT	
DPNMP	Proprietary Encrypted 128 Bit with Netmon NMS
Software Upgrades	Automatic over network with MD5 Checksum
Remote Management	Secure Shell or optional web interface

DISTANCE	
25 miles	5.8GHz with Andrew 29dBi dish (10mbps real throughput)
10 miles	5.8GHz with 18dBi integrated panel (12mbps real throughput) 5.8GHz Andrew Dish (18Mbps real throughput)
6 miles	5.3/5.5GHz with 18dBi integrated panel (10-12mbps real throughput) 5.8GHz with 18dBi integrated panel (15 Mbps)
3 miles	5.3/5.5/5.8 GHz with integrated 18dBi panel (18Mbps)
1 mile	5.3/5.5/5.8GHz with integrated 18dBi panel (20Mbps)