

# Long Range Integrated Radio & Antenna



Interface	
Ethernet Interface	100 base-T Ethernet
Wired LAN Protocol	IEEE 802.3 (CSMA/CD)
Wireless Interface	OFDM, TDD
Wireless LAN Protocol	IEEE 802.11a, Atheros 802.11a Turbo, WPM (Wireless Polling MAC)

Radio	
Supported Frequencies	Europe (ETSI): 5500-5700 MHz (11 channels) with DFS (Dynamic Frequency Selection), USA (FCC): 5180-5320 MHz (8 channels), 5745-5825 MHz (5 channels), UK (OFCOM FWA): 5735-5835 MHz (4 channels) with DFS (Dynamic Frequency Selection), Africa&Asia (OTHER): 4920-6100 MHz (236 channels, 5MHz step)
Modulation Technique	BPSK, QPSK, 16QAM, 64QAM
Channel Width	User Selectable - 802.11a: 20 MHz, 10 MHz or 5 MHz, 802.11a Turbo: 40 MHz
Output Power	ETSI: < 30 dBm EIRP OFCOM: < 33 dBm EIRP FCC, Africa: < 40 dBm EIRP
Bit Data Rate (Mbps)	54    48    36    24    18    12    9    6
Receive Threshold (including built-in antenna)	-95dBm -98dBm -103dBm -106dBm -110dBm -111dBm -112dBm -114dBm

System	
Processor	175MHz MIPS 4Kc Processor with Embedded Cache
Memory	2MB NOR FLASH, 16MB SDRAM
RF Module	Atheros AR5006XS with XR Technology

Software	
Security	Association Protocol - ESSID, WEP 40/128, AES
Features	Bridge, Router, NAT Router, PPPoE Client, Packet Filtering, QOS, DHCP Server/Client, Port Forwarding

Physical	
Dimensions	320 mm X 320 mm X 100 mm
Operating / Storage Temp.	-40°C - +70°C / -40°C - +85°C
Enclosure	IP65 Rated, UV Protected, Outdoor Mountable, Weather Protected
Power Adapter	12V / 1.2A DC, Active Ethernet (PoE Injector included)
LEDs	3 - Power, Ethernet LAN Activity, Wireless Activity
Mounting	Adjustable Mast Mounting

Antenna					
Type	23dBi Flat Panel Antenna				
Built-in Patterns	<table border="1"> <thead> <tr> <th>E-Plane</th> <th>H-Plane</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> </tbody> </table>	E-Plane	H-Plane		
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Operational Distance	
Bit Data Rate (Mbps)	54    48    36    24    18    12    9    6
Operational Distance (m.)	3200    4300    5900    7200    9100    11200    16000    19500

Regulatory Compliance	
CE mark, ETSI EN 301 893 Compliant, FCC Part 15 Compliant	