RADITEK

RADLINK
3.5 or 5.8GHz P2MP

Transceiver, Point to Multi-Point,
High Bandwidth, 3.4 or 5.8GHz, 300Mb, TDMA

Base

Subscriber

Subscriber

Order Examples: RADLINK-P2MP-3.4GHz-a9
Description: (Transceiver, Point to Multipoint, 3.5GHz)

Our Point-to-Multipoint Radio is a hi-power, linear 2x2 MIMO radio with enhanced receiver performance. The radio system utilizes the advantages of OFDM modulation and MIMO technology along with a proprietary Time Division Multiple Access (TDMA) protocol to provide exceptional range and speed (100+Mbps real TCP) performance.

Further performance enhancements are achieved with optional GPS Synchronization, providing precision synchronization and timing to eliminate co-location interference and enhance frequency re-use capability

FEATURES

- Fixed P2MP solution that can deliver 300 Mbps air-rate per sector (150+Mbps layer 2 TCP)
- High spectral efficiency (7.5bits/Hz)
- Long Range (30Km+)
- Provides AES encryption technology,
- Very Low Power Consumption: Base Station 8W per sector, Subscriber Station 6.5W
- Designed for rural African conditions with low infrastructure level and limited power availability
- Robust air interface based on MIMO and OFDM technology provides high capacity with NLOS performance
- Advanced Time Division Multiple Access Protocol (TDMA)– Reduced latency and improved throughput
- Intelligent QoS – priority given to voice/video for seamless access
- Traffic Shaping – Up and down stream traffic shaping per client
- Scalability – High capacity and can support more than 120 clients per sector
- Static Routing
- Highly-secure remote management via SSL, SSH and SNMPv1 and SNMPv32
- AirControl NMS forms part of standard equipment
- MAC, Ethertype and IP address packet filtering for granular network security.
- Built in real-time spectrum analyzer (standard with all equipment)
- Integrated Lightning Protection
- Option: GPS Synchronization– Synchronized transmission eliminates co-location interference
- Option: Channel Re-use & Frequency reuse for improved scalability
- Option: Dual Ethernet Ports providing power to a second device using PoE.

WORLD HQ: 1702L Meridian Ave. Suite 127, San Jose, Ca 95125, U.S.A.
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Transceiver, Point to Multi-Point, 3.4 or 5.8GHz, 300Mb, TDMA

Our TDMA protocol allows each client to send and receive data using a pre-designated time slot scheduled by an intelligent AP controller.

This “time slot” method of provisioning clients eliminates hidden node collisions and maximizes airtime efficiency, providing magnitudes of performance improvements in latency, throughput and scalability when compared with other outdoor systems in its class.

APPLICATIONS

Connecting Communities: Cost-effective access within communities, municipalities and educational institutions specifically in rural low-density areas.

Security & Surveillance: Wireless connectivity for High Definition cameras in applications that require high bandwidth and low jitter.

Last Mile Access: Broadband services for residential, business and public enterprise users, with secure access differentiation as well as NLOS connectivity in diverse environments such as medium-density urban areas or foliage in rural areas.

Enterprise Networks: Leased line replacement for cost-effective connectivity, providing services between nodes in enterprises, campuses and remote sites.

Specifications

Integrated Dual Polarized Antenna	**3.4-3.7GHz**	**4.9-5.8GHz**	**Power (W)**	**Dimensions (mm)**	**Weight (Kg)**
Base Station	120° /17dBi	120° / 19dBi	8	140x700x120	3.5
Base Station + GPS Synchronization	120°/ 17dBi	120° / 19dBi	8	140x700x120	3.5
Corporate Subscriber	19dBi	11º / 25dBi	6.5	400x400x100	2.8
Residential Subscriber	N/A	20º / 22dBi	6.5	315x315x110	2.8
Capacity					
Base Station:	150 Mbps Full Duplex (Layer-2 TCP) per Sector				
Subscriber:	150 Mbps Full Duplex (Layer-2 TCP) per TDMA time-slot				
Interfaces					
Wired Ethernet 1x10/100 BASE-TX (Cat 5, RJ-45) Ethernet			1	2 (GPS Model)	
Radio Specifications					
Number of CSUs per BSS	Up to 120				
Range	Up to 30 Km				
Frequency Bands (Granularity)	5MHz with - 2.0MHz offset				
Channel Bandwidths	5MHz, 10MHz, 20MHz & 40MHz				
Modulation	2x2 MIMO- OFDM (BPSK/QPSK/16QAM/64-QAM) with Adaptive Modulation & Coding				
Duplex and Access Technology	TDD with adaptive TDMA protocol				
Encryption	AES128				

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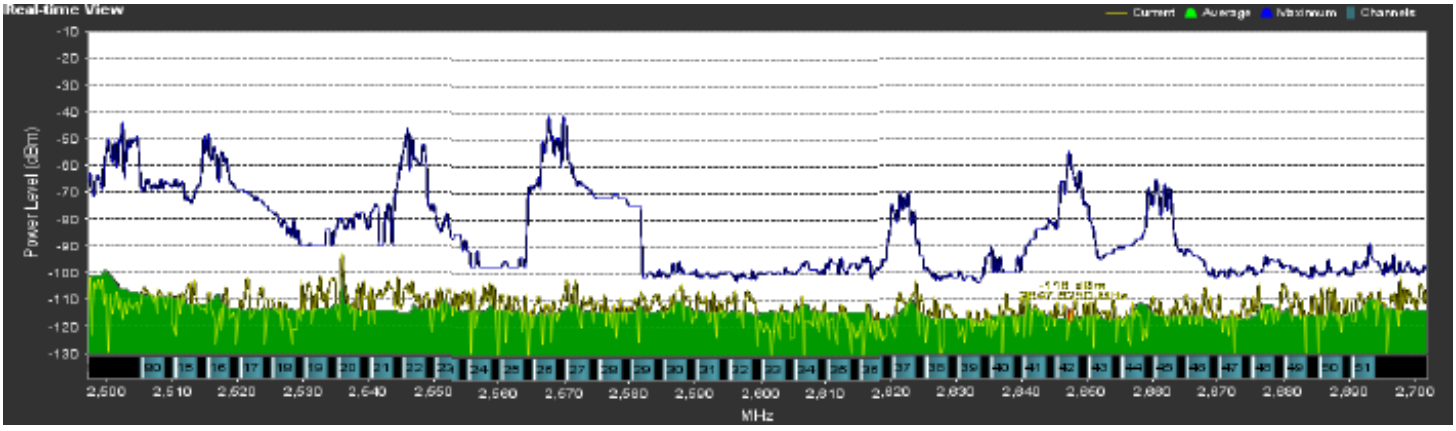
Radio Performance (Air Interface)			
Modulation & Coding Schemes	(30-90 Mbps) MCS8-MCS10	(120-240Mbps) MCS11-MCS13	(270-300Mbps) MCS14-MCS15
TX Power	28dBm ±2dB	(25dBm-28dBm) ±2dB	(22dBm-24dBm) ±2dB
RX Sensitivity (1x10-6 BER)	-90 to -95dBm	-79 to -87dBm	-75 to -78dBm
Networking			
QoS	Intelligent QoS – priority given to voice/video for seamless access		
Routing	Static Routing		
Management			
BSS & SSU Management	Web based management and/or AirControl NMS		
Protocol	SSH, HTTPS, SNMPv11, SNMPv32		
Spectrum Analyser	Advanced Spectrum Analyzer Functionality: Waterfall, Waveform, and Real-time spectral views		
Power			
Power Feed	All power provided by Power over Ethernet units (PoE)		
Environmental			
Operating Temperature Range	-35°C to +70°C		
Storage Temperature Range	-55°C to +85°C		
Operating Humidity	100% Condensing, IP67		
Shock & Vibration	ETSI 300-019-1.4		
Mechanical			
Construction	Sealed die-cast aluminum housings with Gore® Vent equalizer		
Standard Compliance			
FCC	FCC part 90Y, 47CFR Class B, Part15, Sub-part B		
ETSI/ITU	EN302 502, EN 301 893, EN302 326-2 v1.2.2, EN300 386, EN 301 489-1, EN 301-489-4		
Regulatory	ICASA TA-2007/1243		



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