



ViaNET

Wireless Broadband for Vehicular Applications

Main applications:

- Metro rail networks
- Backhaul for wireless CCTV
- Urban Transit Systems
- Train-to-Track connections
- Passenger information systems
- Multimedia information services

Key features:

- Advanced OFDM radios
- Best in class-AES encryption
- Supports 2.4-2.5 and 5.470- 5.850 GHz
- High data throughput for wireless mobile backhaul
- Seamless handovers between access points with zero-delays
- Very low end-to-end latency, supports real time CCTV and VOIP applications
- Ruggedized IP 67 class hardware design
- Optional 802.11 a/b/g Wi-Fi access point mode for complementary services

Wireless backhaul for Vehicular applications

Airspan has developed a pioneering new technology for enabling of broadband applications in vehicular systems. This technology is a robust Wireless Backhaul for Vehicular Environments (WBVE). ViaNET product line offers unique WBVE solution which can be used to support multiple applications.

Wireless broadband backhaul with ViaNET brings mobility support for environments (underground tunnels, metros, mines, on the ground environments) where such high throughput data backhaul connections have not been possible before.

The unique features of this solution include a zero-delay hand-over time which makes it useful in networks running applications that demand fast response times and robust infrastructure.

Ruggedized product design for demanding environments

ViaNET products were designed to meet most critical industrial and environmental requirements. These devices meet IP67 protection class requirements.

Typical deployments include underground tunnel, on-the-ground and vehicle installations.

Flexible dual-band, dual-radio transceiver design

ViaNET hardware products include an access point and a mobile terminal model. Access points are deployed along the routes of the vehicles such as trains and trams. Mobile terminals are installed into vehicles as on-board transceivers.

The ViaNET system design is based on intelligent 'make-before-break' handover protocols and advanced OFDM radio transceivers. Each radio unit includes two transceivers, which can both support 2.4 GHz and 5 GHz frequencies.





Technical Specifications



Product Features	
Application areas:	Wireless mobile broadband backhaul applications, urban transit systems
Radio and modulation type:	OFDM radio, supports BPSK, QPSK, QAM (16-64) modulations
Number of radio units:	2
Frequency bands:	Mobile Terminal: 2.400-2.4835Ghz and 5.470-5.725GHz Access Point: 2.400-2.4835 GHz, and 5.470-5.725/5.725-5.850 GHz
Transmit power:	Max 17dBm at antenna port (adjustable)
Data transfer rates:	1, 2, 5.5, 11 and 6, 9, 12, 18, 24, 36, 48, 54 Mbps
Antenna:	No integrated antenna, Used with external antennas Access point: Heavy Duty Industrial, Access Antenna, 30°, 14dBi Mobile Terminal: Heavy duty industrial Client Antenna, 90°, 10dBi
Management	
	Wireless, Ethernet Web based (HTTP, HTTPS) Encrypted (SSH2) command-line interface Multiple administrative classes Centralised web based (HTTPS) management via Mobile Terminal Server UserID/Password authentication SNMP v2c, MIB II, traps Remote software and settings update
Security	
	WPA-PSK AES or WEP
Networking and QoS	
	Transparent bridging Handover control/configuration 802.11a/b/g access point services Traffic prioritization
Environmental Specifications	
	10...90% relative humidity (non-condensing) -40°C to +70°C, IP67 IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-27, IEC 60068-2-52, IEC 60068-2-64
Standards Compliance	
	IEEE 802.3, EN 300 328, EN 301 893, EN 301 489: 1 & 17, EN60950 Power consumption max 33W, 12-30VDC, outdoor proof power supply included 110-240VAC in, 24VDC out
Mechanical & Electrical Specifications	
Interfaces:	2 * Ethernet Interfaces(10/100 Base Tx), 4 * N-Connectors, Outdoor rated connector for external power supply
Physical dimensions:	250mm x 265mm x 81mm (W & H & D), weight 3 kg

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