



WiBE[®] - Wireless Broadband Enabler

WiBE-HS21-Pro Datasheet

Applications

- Rural broadband
- Home or small office data connection
- Extending cellular data coverage
- Backup for wired broadband
- Internet connectivity for boats, caravans & all vehicles

Description

Access to the Internet is an everyday part of life, but in many areas ADSL speeds are slow and satellite and fixed broadband wireless solutions are expensive. The WiBE (Wireless Broadband Enabler) uses multi-beam antenna technology to extend the range and throughput of a 3G mobile network. This allows the 3G network to be a viable option for fast Internet access, bringing speeds of up to 21Mbps, and an average of 2 Mbps in rural areas.

The WiBE scans using a patented multi-beam antenna system and selects the link offering the best data connection. It continues to monitor the 3G network automatically to ensure that the best available link is maintained.

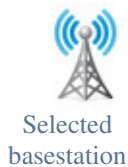
The WiBE provides WiFi coverage within a home or small business using a powerful IEEE802.11bgn WiFi router with many advanced features. These include integrated security and firewall, as well as QoS (Quality of Service) support. For most users no configuration is required, with all settings being taken from the SIM and local 3G network.

Overall, the WiBE enables broadband in places that other technologies cannot reach.



Key Features

- Intelligent multi-beam antenna technology
 - Extends range
 - Maximises data throughput
 - Reconfigures to maintain best connection
- Integrated IEEE 802.11bgn WiFi router
 - Best range for local coverage
 - Connects users to each other and the Internet
- Security and management
 - WiFi protected access (WPA2/WPA)
 - Powerful SPI firewall
 - Simple browser-based management interface
- Plug and play
 - Self-configuring
 - Settings taken from SIM and local 3G network
- Waterproof to IP65
- Rugged housing and mounting system
- Powder coated metal base with ABS UV-stabilised radome
- Single Cable Solution



High gain in the direction of wanted signal gives improved signal strength at the receiver



High rejection of interfering signals from other basestations gives greatly improved performance at cell edge



3G Antenna:		
Frequency range	1710 – 2170MHz	
Polarization	Linear (vertical)	
Number of beams	4	
Signal Gain (at 2000MHz)	>20dB per beam (Relative to USB Dongle)	
Horizontal 3dB beamwidth	90° (±5°) per beam	
Vertical 3dB beamwidth	60° (±5°) per beam	
Isolation	> 25dB	
Front-to-back ratio	> 20dB	
3G data link:		
Technical standard	HSPA/UMTS	3GPP
Operating frequency	HSPA/UMTS	1900, 2100MHz
Maximum downlink transmission rates ²	HSDPA HSUPA	21Mbps, Categories 1-14 5.76Mbps, Categories 1-6
Security	EAP-SIM support	
Power class	3 (+24 dBm)	
Wireless LAN:		
RF Specification	2.4 GHz IEEE 802.11bgn	
Security	WPA/WPA2 64/128-bit WEP encryption MAC address I/P Filtering	
QoS	WiFi multimedia (WMM) Priority queue Bandwidth allocation	
Region selection	via WEB Interface	
Router:		
LAN	DHCP server Static routing table Statically assigned IP addresses UPnP Universal Plug and Play VPN passthrough	
Firewall	NAT/NAPT SPI (Stateful Packet Inspection) MAC/IP port filtering Port forwarding Virtual server mapping IP address mapping Port forwarding DDNS (Dynamic DNS) DMZ (De-militarized Zone)	
Control interface:		
Configuration	Web-based (HTTP) Via Ethernet port or WiFi Automatic APN selection by SIM network detection	
Upgrade	User-initiated router upgrade	
Power supply:		
Input voltage	8V-18V DC, 12V nominal	
Power consumption	< 5W	
Connectivity	SM cable with bare ends for Ethernet and power	
Mechanical and environmental:		
Power	12V DC Nom via wire ends	
Data connectors	Ethernet (x1)	
Connector positions	Base of unit	
Mounting	1" pole mounting collar	
Size (width x height x depth)	210mm (H) without collar 230mm (H) with collar x 155 mm (Dia)	
Weight	900g	
Operating temperature range	-10°C to +45°C (with solar loading up to 1120W/m ²) (Allows unit to be located in direct sunlight)	
Ingress protection	IP65	

All specifications are subject to change without notice. Please contact Deltenna for more detailed information.