FS1000N Wireless Bridge Kit

Features

The FS1000N Wireless Bridge is a high throughput industrial wireless bridge system that delivers over 200Mbit/sec to the end user. The FS1000N has been specifically designed to deliver optimum performance over a distance of 1.6km.

The FS1000N integrates FreeSpace Networks' leading edge Scorpion platform, a fully integrated MIMO antenna and powerful 700MHz CPU. The FS1000 is simple to use, configure and install.

All 5Ghz license exempt frequencies are supported and the device has been optimised for Fixed Wireless Access (FWA) applications such as data, voice and wireless CCTV.

128Bit AES hardware encryption and MAC based access control provide an unparalleled level of transmission protection and data security. In addition to supporting standard 802.11n operation, the FS1000N also provides support for legacy 802.11a devices, allowing backward compatibility with previous generations of the FS1000 bridge.

Product Highlights

- 200Mbit/sec at 1.6km, 130Mbit/sec at 3km
- 4.9 - 5.875 GHz operation, subject to local restrictions
- Factory configured bridge kit
- Small form factor IP67 enclosure
- 11dBi 50° integrated 2x2 MIMO antenna
- Power over Ethernet
- Full Duplex Gigabit Ethernet
- 802.11h (DFS/TPS/Radar Support)
- 128 Bit AES-CCM hardware based encryption
- WPA & WPA2 as standard
- 802.11ac upgrade available (Q1'14)
- Less than 6W under full load

Applications

The FS1000N is ideal for the following applications :-

- Short range transmission of:

  - CCTV
  - DATA
  - VOIP

- Building to Building links

- Network Expansion

- Fibre and Leased Line Backup

- Covert Security Surveillance

- Residential Access Control

- CCTV Security

- Last Mile Broadband Access

- Mobile Applications

- Temporary networks such as:

  - Public Events
  - Construction Projects
  - Marine Applications

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Solutions for the wireless industry

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Hardware Specification

RADIO	
Maximum Operating frequency	4.9 - 6.1 GHz, depending on local legislation
Modulation	OFDM: 16QAM, 64QAM (802.11na) with automatic rate adaptation and transmit power control
Maximum RF output power	24dBm (250mW), 2x2 HT 40 Mode, 300Mbit/sec
Antenna	11dBi 50° dual polarised 2x2 integrated antenna
Maximum EIRP	35dBi, automatically adjusted, based upon territory.
Maximum datarate	300 Mbit/sec in 2x2 HT40 Mode
DFS/TPC support	Complies with EN302-502
Security	128bit AES-CCM Cipher with WPA/WPA2 Support
Interface	
Ethernet	802.3ab,802.3u, 802.3i (1000/100/10 Mbit Ethernet) with auto cross-over and negotiation
Ethernet connector	standard RJ45 with field installable IP67 fitting
Power	
PSU type	802.3at (48Vdc) Power Over Ethernet, Gigabit Compatible
Typical power consumption	6W
Environmental	
Environment	IP67
Operatng Temperature	-20 to +60°C
Humidity	95% RH non-condensing
Physical	
Dimensions	160mm x 134mm x 87mm
Weight	0.5kg
Approval	
IR2006 (5150-5725MHz) IR2007(5725-5850MHz), EN302-502(DFS/TPC), EN301-489 (ERM/EMC) EN60950 (Safety)	
Warranty	
Hardware	1 Year return to base

Software Specification

Management Interface	
Remote access	WifiMonitor NMS tool, onboard webserver, remote firmware update
Remote monitoring	SNMP, WifiMonitor
Data management	
VLAN	802.1q and trunked applications
QoS	802.1p
Security	
Encryption	128bit AES-CCM with WPA/WPA2 Support
Device Access Control	MAC based Access/Deny Control