NEC

FP813

Small Cell for Homes

FP813 small cell is a 'zero touch' consumer premises device for homes and small offices. The plug and play capability enables an end user to self install in the premises much like a WiFi device - with ease and without any operator support and intervention. Thereafter, the device automatically sets up the connection to the operator's core network over the subscriber's broadband connection and interacts with 3G handsets without any modification needed in the handset. FP813 supports full HSDPA and HSUPA data rates whilst supporting up to 8 simultaneous calls. FP813 can operate in closed or open mode as required by operators.

Features

FP813 is able to autonomously adapt to its RF environment to provide best coverage and incorporates an adaptive and distributed radio management function obtaining optimal local coverage. This helps operators to reduce effort and expenditure on network rollout and optimization.

FP813 provides dedicated 5-bar coverage for end users in homes and in small offices thus improving the end user experience and ultimately their loyalty to operators.

- Designed for use in homes and small offices
- Handles up to 8 simultaneous calls
- Supports HSDPA up to 14.4 Mbps downlink
- Supports HSUPA up to 5.7Mbps uplink.
- Transmit power up to 13dbm (20mW)
- Effective cell radius ~50m, depending on actual deployment environment
- Supports UMTS Bands I, II/V and IV
- Remote device management: TR-069
- Optional GPS for E911 support where needed

Small Footprint

FP813 has an elegant and compact design to unobtrusively fit in to the modern home or a small office. It is energy efficient, consuming less than 4W of power, far below the 2009 EU target of 11W.

Best Performance

Despite its diminutive proportions, FP813 is at the leading edge of small cell performance supporting up to 8 calls and data speeds up to 14.4 Mbps.

Home & Small Office

FP813 can be deployed in homes and in small offices. Easy to wall mount or simply free-standing on any flat surface

Field Proven

FP813 has been proven in multiple commercial deployments worldwide and has been proven in different deployment scenarios ranging from shared carrier to dedicated carrier.

Feature	Specification
Number of calls	4 or 8 subject to soft key licensing
HSDPA	up to 14.4 Mbps, supports Categories 1 to 12
HSUPA	up to 5.7 Mbps, supports Categories 1 to 6
Maximum transmit power UMTS	+13 dBm
Ethernet	IEEE802.3 10/100 Base-T twisted pair Ethernet Physical connector: standard RJ45 socket 8 pins 1 port
DC Power	Single DC jack socket for external plug top power supply. Power rating 5v/1A
SIM	Push-push SIM socket on the underside of the case in a covered recess.
Reset Switch	Single push button switch
Indicators	Single dual color LED (Red/Green)
Dimensions	W 168mm x H 29mm x D 114mm
Weight	<300g (including external power supply adaptor)
Case	Tamper-proof
Mounting options	Free standing and wall mounting
Acoustic noise	None: passive cooled
Operating temperature	0°C to 40°C
Energy consumption	<4W
Frequency Bands	UMTS Band I (UL:1920-1980 MHz & DL:2110-2170 MHz) with GSM 900/1800 monitoring UMTS Band II (UL:1850-1910 MHz & DL:1930-1990 MHz) & Band V (UL:824-849MHz & DL:869-894MHz) with GSM 850/1900 monitoring UMTS Band IV (UL:1710-1755 MHz & DL:2110-2155 MHz) with GSM 850/1900 monitoring
Interference management	Fully automatic: real-time cognitive radio
Network interface	3GPP GAN, 3GPP Iuh and IMS
Broadband security	IPSec
Device security & authentication	Certificate or (U)SIM
Remote device management	Broadband Forum TR-069
MTTF	100,000 hrs
Product Life	> 5 years
Regulatory Compliance	Safety: EN 60950, CB certification (IEC 60950) • EMI Directive 1999/5/EC on R&TTE: - EN 50385 - EN 301 489-1 and 301 489-23 - EN 301 908-1 and 301 908-3 • FCC Part 15, Class A • FCC Part 24 (UMTS Band II) • FCC Part 27 (UMTS Band IV) • FCC Part 22 (UMTS Band V) • Materials: Directive 2002/95/EC on RoHS • General: CE and NRTL marking

Any technical specifications contained herein are subject to change without notice.

Zero Touch

No cell-planning or operator installation – this is a self-optimising, plug & play device.

Network Management

Intelligent, Proactive Service Monitoring & Service Assurance, with detection of service effecting events to trigger service alarms