Small Cell Solutions

Enterprise Cells & Public Hotspots
FPA1624 Small Cell Family

BEST PERFORMANCE

Leading edge data performance. Each unit can handle up to 16 calls and download speeds up to 21 Mbps.

BUSINESS & PUBLIC

The FPA1624 family can be deployed in business and public indoor spaces, where several devices automatically create a self-organising grid of 3G coverage.

FIELD PROVEN

The software and hardware design have both been proven in several deployments worldwide, and include unique real-time interference mitigation technology.

The FPA1624 small cell from NEC is a small yet powerful indoor base station, best suited to deployment within public-access and enterprise premises, delivering enhanced coverage, capacity and user experience. It offers a more cost-efficient and vastly superior solution compared to picocells, by requiring no cell planning or optimization, as it autonomously and continuously scans its RF environment and self-optimises its own configuration in response to changes in the radio environment and subscriber demand. It is built on years of small cell development and field deployment and supports the full HSPA+ data rates whilst supporting up to 16 simultaneous calls and 1000 simultaneously camped-on idle mode subscribers.

- Designed for Indoor use in medium and large Enterprises & Public spaces
- Handles up to 16 simultaneous calls
- Supports HSPA+ 21 Mbps/5.7Mbps
- Transmit power up to 24dbm (250mW)
- Effective cell radius ~250m, depending on actual deployment environment
- Support of UMTS Bands I, II/V, and IV
- Remote device management: TR-069
- NEC's Grid-SON technology with inter-cell handover for seamless deployment of several cells in larger and multi-storey buildings
- Easy wall mounting
- Power over Ethernet (PoE+) built-in
- External Antenna connector
- Optional GPS for E911 support where needed

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ZERO TOUCH

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

MOBILITY

NEC's unique Grid-SON technology, creates a self-organising coverage grid of small cells with Handovers enabled between them

NETWORK MANAGEMENT

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

For more information on any of our products or services please visit us on the Web at:
www.nec.com/femtocell
www.nec.com/smallcell

Key Product Features

Feature	Specification
Number of calls	8 or 16 subject to soft key licensing
HSPA performance	up to 14.4 Mbps, downlink up to 5.7 Mbps uplink Software upgradable to 21Mbps HSPA+
Maximum transmit power UMTS	+24 dBm (250mWatts)
Ethernet	IEEE802.3 10/100 twisted pair Ethernet (1 Port) Physical connector: standard RJ45 socket 8 pins
DC Power	Single DC jack socket for external plug top power supply. Power rating 12v/1.5A
SIM	Push-push SIM socket on the side of the case in a covered recess.
Reset Switch	Single push button switch
Indicators	Two Single color LED (Red) and one Dual color (Red/Green) LED
Dimensions	W 250mm x H 43mm x D 204mm (excluding wall mounting bracket)
Weight	<800g (including external power supply adaptor)
Case	Tamper-proof with secure SIM aperture
Antenna connector	2 x MMCX type antenna port to connect with external antenna.
Acoustic noise	None: passive cooled
Operating temperature	0°C to 40°C
Energy consumption	<7W
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 (Band V) • Materials: Directive 2002/95/EC on RoHS • General: CE and NRTL marking

NEC