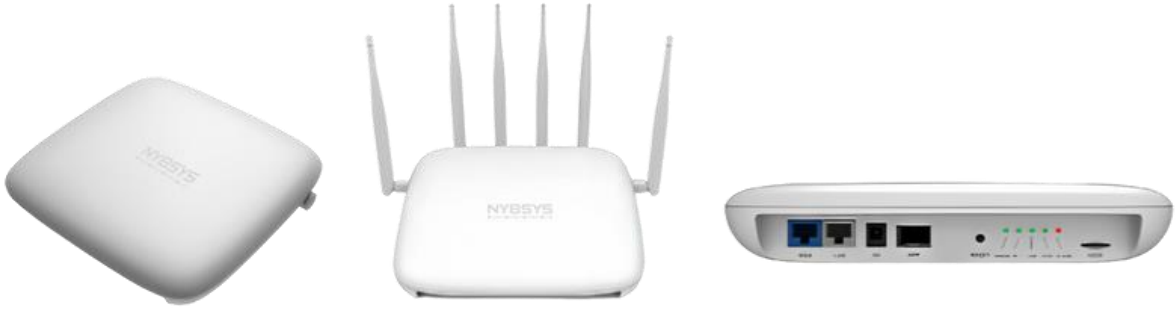
NanoLink 2308: Integrated Indoor Small Cell

NL 2308

OVERVIEW

The NL 2308 is CBRS dual-carrier LTE small cell targeted at indoor enterprise environments. The units can be installed by both end-users in “Plug-and-Play” mode and technicians in planned deployment. With 2*250mW output power of each cell and high performance, such as carrier aggregation, the NL 2308 can help mobile operators improve coverage and capacity with minimum cost.



FEATURES

- Standard LTE bands: TDD bands 42/43/48
- The peak data rate of each cell (20MHz)
  DL 130Mbps (256QAM, SF2)
  UL 30Mbps (64QAM, SF1)
- The peak data rate of carrier aggregation(20MHz)
  DL 260Mbps (64QAM, SF2)
  UL 60Mbps (64QAM, SF1)
- Maximum 2*64 VoLTE users, 2*64 RRC active users and 2*192 RRC-connected users
- All IP-based backhaul; many IP backhaul methods can be used, including RJ45 Ethernet and SFP
- Plug-and-play with SON features, including self-configuration, self-optimization, self-healing
- Local Web GUI management, network management with the HeNB management server
- Compact and beautiful design, supplied with high-performance integrated antennas
- PoE supported, lower power consumption to reduce OPEX

info@nybsys.com | www.nybsys.com

ENVIRONMENT

Operating Temperature	-5°C to +45°C
Storage Temperature	-45°C to +70°C
Operating Humidity	5% to 95%
Storage Humidity	5% to 95%
Housing self-extinguishing class	V-0
IP Rating	IP30
Shock when packaged	ETSI 300 019 1-2 (class 2.3); NEBS GR63
Shock unpackaged	Max Drop Height: 750mm in hard ground

HARDWARE SPECIFICATIONS

LTE Mode	TDD
Frequency Bands	TDD: 42/43/48
Channel Bandwidth	5/10/15/20 MHz
Characteristic Impedance	50Ω
Number of RF Ports	6 RF (4*ANT, SNF, GPS)
Max Output Power	24 dBm / antenna
Transmitter Performance	36.141, Home BS compliance
Receiver Performance	36.141, Home BS compliance
Synchronization	GPS, IEEE 1588v2 PTP, Network Listening
Backhaul	1 RJ45 Ethernet (10/100/1000 Auto-negotiating); SFP
Power Supply	90 - 254V AC to 12V DC; POE+ (IEEE 802.3 at standard)
Dimensions	220mm (H) * 220mm (W) * 40mm (D)
Weight	< 1kg
Power Consumption (W)	< 20W
Antenna	Internal: 3 dBi < 120°; External: 5 dBi omni antenna
Installation	Desktop, Ceiling or Wall mounted
Material	Top: plastic; Bottom: cast-aluminium

info@nybsys.com | www.nybsys.com

SOFTWARE SPECIFICATION

LTE Standard	3GPP Release 12
Peak Data Rate (20MHz BW) of each cell	DL 130Mbps (256QAM, SF2) UL 30Mbps (64QAM,SF1)
Peak Data Rate (20MHz BW) of carrier aggregation	DL 260Mbps (256QAM, SF2) UL 60Mbps (64QAM, SF1)
Modulation	DL: QPSK, 16QAM, 64QAM, 256QAM UL: QPSK, 16QAM, 64QAM
Max User Number	2 * 64 VOLTE users 2 * 64 RRC active users 2 * 192 RRC connected users
SON Features	Self-configuration: • Automatic Neighbor Relation (ANR) • Physical Cell Identity (PCI) • Autoconfiguration • Radio Environment Management (REM) • S1/X2 autoconfiguration • RACH channel self-configuration • Channel Selection • Transmission Power Management Self-optimization: • MRO, MLB, CCO, RACH organization Self-healing: • Automatic cell outage detection • Software recovery
Maintenance	Online status monitoring and management Performance management, KPI recording Fault management, Alarm reporting Configuration management Local or remote software upgrade User information tracing
QoS	3GPP standard QCI
MTBF	≥ 150000 hours
MTTR	≤ 1 hour

For details please contact sales@nybsys.com