



# NanoLink 2365 LTE & 5G Sub-6GHz Dual mode All-in-one Indoor Small Cell

NL 2365

## OVERVIEW

The NanoLink 2365 is an advanced LTE and 5G combo indoor small cell. It boosts indoor cellular coverage and capacity effectively.

Supporting both LTE and 5G NR Sub-6GHz bands, NL 2365 caters to high-speed connectivity needs across diverse environments. It supports up to 32 active LTE and 64 active 5G users, with the capability to handle 64 LTE and 128 5G connected devices.

Its lightweight design (<3 kg) allows for easy installation on walls or ceilings. So, NL 2365 is perfect for enterprises, commercial buildings, and other indoor spaces requiring extended coverage.

The device features plug and play zero-touch deployment, utilizing either broadband internet or dedicated MNO's mobile packet backhaul network to seamlessly integrate with LTE and 5G core systems. It supports both standalone (SA) and non-standalone (NSA) modes for flexible deployment scenarios, including future migration to standalone 5G core networks.

The NL2350LTE-5G small cell is compatible with Nybsys Nexus Security Gateway and optional aggregators, or can directly connect to MNO's core network, ensuring robust security and efficient operation.



## Features

- Supports both 4G/LTE and 5G NR (Sub-6GHz).
- High User Capacity:
  - 5G mode: Up to 64 active users and 128 connected users.
  - 4G mode: Up to 32 active users and 64 connected users.
- Modulation and Bandwidth:
  - 5G: DL 256QAM, UL 64QAM.
  - 4G: Similar maximum modulation capabilities with support for various bandwidths.
- Frequency Bands:
  - 5G: N78, compatible with 3GPP 5G-NR Rel-16 standards.
  - 4G: Operates on LTE Band 3 with FDD duplex mode.
- Antenna Configuration:
  - 2x2 MIMO configuration for both 4G and 5G systems with internal antennas.
- Synchronization:
  - GPS, IEEE 1588 for precise timing and coordination.



- **Power and Connectivity:**
  - Power supply via 12V DC or PoE++.
  - Dual RJ-45 ports (up to 2.5Gbps for backhaul and 1Gbps for local management terminal or LMT).
- **Physical and Environmental Specifications:**
  - Compact enclosure dimensions (<3L) and lightweight (<3 kg).
  - Low power consumption (<50W).
  - Durable construction with PC-ABS and cast aluminum, meeting UL94 V-0 flammability standards.
  - IP31 rating for dust and water resistance.
  - Operational in temperatures ranging from -10°C to +45°C and storage from -20°C to +70°C.
  - Supports both wall and ceiling mounting.
- **Reliability and Certification:**
  - Ensures high reliability with operational humidity range of 10% to 95%.



## Specifications

5G (FR1) System Specification			
Category	Subcategory	Item	Specification
Synchronization	Synchronization scheme	Sync Sources	GPS IEEE 1588
Capability	NR Capability	Max. modulation (DL)	256QAM
		Max. modulation (UL)	64QAM
		Max. number of connected users	128
		Max. number of active users	64
		Max. number of VoNR users	64
5G Sub-6G RF	Frequency Bands	Frequency Range	N78
		Standard	3GPP 5G-NR Rel-16
		Duplex	TDD
		Band width (MHz)	20/40/50/60/70/80/90/100MHz
	Antenna	MIMO Configuration	2 x 2
		Antenna Location (Internal / External Connectorized)	Internal
	TX specification	Output power	24dBm (conducted)
	Radio conformance	Radio conformance spec.	3GPP TS 38.104, 3GPP TS 38.141-1



4G (LTE) System Specification			
Category	Subcategory	Item	Specification
Capability	LTE Capability	Max. modulation (DL)	256QAM
		Max. modulation (UL)	64QAM
		Max. number of connected users	64
		Max. number of active users	32
		Max. number of VoLTE users	32
4G system	Frequency Bands	Frequency Range	LTE Band3
		Duplex	FDD
		Band width (MHz)	5,10,15,20MHz
	TX specification	Output power	21dBm
	Radio conformance	Radio conformance spec.	3GPP TS 36.104
	Antenna	MIMO Configuration	2 x 2 (per carrier)
		Frequency Range	L5G Band 41(2496-2690MHz) LTE Band 3 (DL: 1805 – 1880MHz, UL: 1710 – 1785MHz)
		Antenna Location (Internal / External Connectorized)	Internal
	Synchronization	Synchronization source	Inband NL
			Outband B1, B5, B7, B8
IEEE1588			
		GPS	

Miscellaneous			
Category	Subcategory	Item	Specification
	GPS	GPS	RGPS
		Connector Type	RJ45
		GPS Antenna interface type	RGPS
	Power	Power supply Type (AC or DC)	DC
		External Power Supply	12V DC
	POE	POE	PoE++
	Reset	Soft reset or Factory reset	Reset and Factory Reset (Separate LTE / 5G NR) For hard reset, 4G and 5G together; For factory reset, 4G and 5G separate by different duration.
	Ethernet	Number Ethernet Ports	RJ-45 x 2 - 2.5 Gbps NBase-T Ethernet: for backhaul - 1Gbps Ethernet: LMT
		Supported Standard	802.3



	LED	LED	5G service 4G service Backhaul link Power Sync Status Alarm
Physical Parameters	Dimensions	Target Enclosure Dimensions	<3L ( 242mm*242mm*50mm )
	Weight	Weight excluding Power Adapter and Installation accessories(kg)	< 3 Kg
	Power consumption	Target Power Consumption (W)	< 50W
	Material	Enclosure Material	PC-ABS + Cast aluminum
	Flammability	Flammability Standard	(Main body, Accessories) UL94 V-0
	Orientation	Product Orientation	Wall Mount, Ceiling

Reliability & Certification			
Category	Subcategory	Item	Specification
Reliability	IP Rating	Rating	IP31
	Operating Temperature	Range	-10°C to +45°C
	Storage Temperature	Range	-20°C to +70°C
	Operating Humidity	Range	10% to 95%
	Storage Humidity	Range	10% to 95%

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