WILSON
CONNECTIVITY

P5G500

Indoor TDD Radio Unit



P5G500: Is an advanced, O-RAN compliant Radio Unit designed for seamless 5G connectivity.

- 4T4R configuration with 250mW per antenna port
- IP50 indoor-rated unit, designed for indoor deployments
- Compatible with 3GPP 5G NR standards
- Supports O-RAN 7-2x split architecture with Fronthaul interface for CUSM-Plane
- TDD/n48/n78 frequency compatibility for flexible deployment
- Supports external antennas and up to 100 MHz bandwidth across 2 Component Carriers (2CC)

Technology

Standard	3GPP TS38.104, Option 7-2a Category A, O-RU CUSM-Plane
Duplex Mode	TDD
Frequency Band	n48 (3550 to 3700MHz), n77 (3700MHz to 4200MHz), n78 (3300 to 3800MHz)
Channel Bandwidth	n48: 10, 20, 40 MHz, n77: up to 100 MHz, n78: up to 100 MHz
Multiplexing	MIMO: 4T4R
Carrier Aggregation	2CC
Sub Carrier Spacing (SCS)	30 kHz / 60 kHz

Interfaces

Interfaces	1 x 10Gbps SFP+ (Fronthaul), 1 x 1GbE RJ45 (PoE++ only), 1 x USB (Console)
Power	Option 1: Adapter (incl.), Input: 100-240V,50-60Hz 1.5A Max, Output: 12VDC, 4.0A, 48.0W, Option 2: POE++ (IEEE 802.3bt3)
LED Indicators	Power, S-Plane, Service
Antenna	External, SMA Internal

Link Budget

Modulation	up to 256 QAM (UL/DL)
Max. Transmit Power	N48 100 mW (20 dBm) per RF antenna port, N77 250 mW (24 dBm) per RF antenna port, N78 250 mW (24 dBm) per RF antenna port

Compliance

3GPP	TS38.114 Section 6, 7
EMC	EN 301489-1/-50, EN55032/55035, FCC Part 15 Class B (CBRS)
Safety	IEC/EN 60950-1 , CB - IEC/EN 62368-1
RF	EN 30190B-1, EN 301908-24, EN 55385 (MPE), FCC Part 96 (CBRS) , [CE RED pending], [RCM/ SDoC pending]

Physical

Ingress Protection Rating	IP50
Operating Temperature	23 to 122 °F (-5 to +50 °C), 5 to 95 % RH
Power Consumption	< 35 W
Weight	< 6 lb (< 2.5 kg)
Dimensions (H x W x D)	10.2 x 11.0 x 2.2 in (260 x 280 x 55 mm)
Installation	Ceiling / Wall / Pole mount

Included Items

Item	Description	Qty.	Notes
P5G500 Radio Unit	Main Radio hardware	1	Main Radio Unit
Antennas	Articulating SMA Omni Dipole Antennas	4	Included w/ Radio Unit
Mounting Bracket Kit	Can be used to mount to various walls, ceilings and poles	1	Included w/ Radio Unit
SFP+ Transceivers	10G SFP+, 1310nm, Single-Mode, Duplex LC, Long Range	2	Accessory Carton
LC-to-LC Fiber Patch Cable (3.0m)	LC-to-LC Fiber Patch Cable Single Mode 3.0m (10 ft)	1	Accessory Carton
PoE Injector / PSU	PoE++ 802.3bt Type 3 AC/DC Midspan Injector	1	Accessory Carton
PoE Injector AC Power Cord	3ft (1m) Heavy Duty Power Cord, NEMA 5-15P to C13 AC Power Cord, 15A 125V	1	Accessory Carton
1.5m CAT6 Patch Cable	5ft (1.5m) Cat6 24AWG Unshielded Ethernet Network Patch Cable, Blue	1	Accessory Carton

Global Part Numbers

P5G-API500-n48	Indoor Low power 5G Access Point (P5G500) band n48 4x4 MIMO 20dBm
P5G-API500-n48i	Indoor Low power 5G Access Point (P5G500-48i) band n48 4x4 MIMO 20dBm, Internal Antennas
P5G-API500-n78	Indoor Low power 5G Access Point (P5G500-78) band n78 4x4 MIMO 24dBm
Installation	Ceiling / Wall / Pole mount

Specifications and ID are subject to change without notice.