

TJ1400-NR BBU

4G LTE and 5G NR Support

The TJ1400-NR BBU supports 4G LTE and 5G NR baseband functionality, to support 5G Standalone and Non standalone deployments. This BBU supports different MIMO configurations including Massive MIMO (32T32R and 64T64R). This BBU supports upto 15 Cells, with each cell connected over an eCPRI/CPRI interface to 4G and 5G Radio Units.

This baseband is 3GPP and O-RAN complaint and supports combined DU/CU architecture, it's highly integrated software defined baseband unit with PHY, MAC, RLC, PDCP and RRC layers of the eNodeB and gNodeB protocol stack for all cells.

This BBU supports both FDD, TDD duplex mode and frequency band agnostic implementation in Low and Mid bands. This BBU offers flexibility both in 4G LTE and 5G NR band and Bandwidth as per the operator spectrum allocation.

This BBU is compact, easy to install and designed for high capacity and coverage deployments. This allows a mobile network operator to deploy 4G LTE and 5G NR broadband services using tower/mast.



Key Specifications

Technology Support	4G LTE, 5G NR and NB-IoT support
Shelf form factor	19" Rack mountable with 1U height
Fronthaul Ports	15 Ports (10Gb/25Gb), combination of CPRI and eCPRI
Backhaul Ports	2 Ports (10Gb/25Gb/100Gb)

Capacity

5G Mode Support	5G NR Non-Standalone and Standalone modes
Duplex support	FDD and TDD
Number of Cells supported	Up to 15 cells
MIMO Support	2T2R, 4T4R, 8T8R, including Massive MIMO 32T32R, 64T64R
Frequency band agnostic operation	Support 3GPP frequency bands (in 4G and 5G) agnostic operation in Low/Mid Bands
Channel BW (MHz)	Upto 100MHz (as per 3GPP in each band)
Modulation Scheme	DL / UL: Upto 256QAM

Environmental

Power Type	-48V DC, with redundant power inputs
Operating Temperature	0°C to +55°C

Compliances

3GPP	Release 15 compliant, software upgradable to Release 17
O-RAN	ORAN Option 7-2x, complaint to v04.00, software upgradable to later releases