

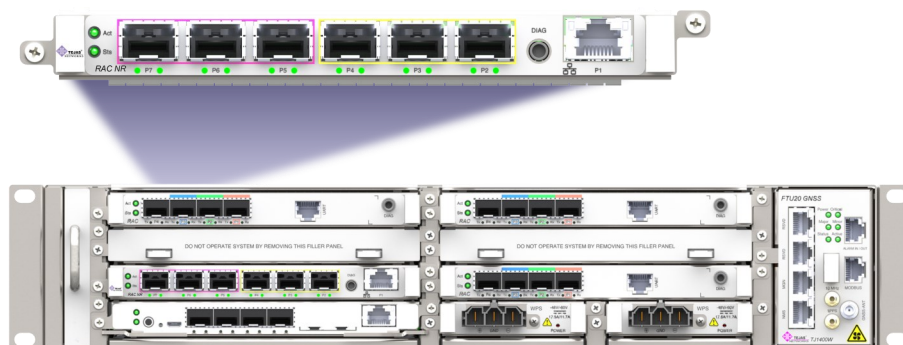
TJ 1400-7 eNodeB

Broadband Wireless Access

Converged Multi-service Platform with
4G and 5G RAN Access



DATA SHEET



TJ1400-7 with RAC Card

Product Highlights

- 3GPP compliant eNodeB
- 5G upgradable
- Band FDD (1, 3, 5, 8*, 28), TDD (38, 39, 40, 41, 42)
- 4x4 MIMO (or act as dual 2x2 MIMO system)
- GPS Synchronization support
- Configurable bandwidths: 5/10/15/20 MHz
- 64 QAM uplink capable
- Up to 30 carriers in one 1/2-depth, 2U rack
- Backhaul transport integration
- Redundant Power Supply, FAN, Controller

Overview

- Tejas high capacity, macro FDD+TDD LTE eNodeB RAN on the converged access TJ1400-7 platform with 5G Release 15 upgrade support
- Can be scaled cost-effectively for all deployment scenarios from sparse rural to high density urban coverage requirements.
- Small footprint, low power consumption, fully re-programmable hardware.
- Support for all security and synchronization requirements

Key Benefits

Efficient upgradation and scalability:

Cell sites with fibre backhaul can seamlessly integrate transport and LTE access with the added benefit of unified OAM, space and power savings.

Flexible: The RAC card can act as a coordinated 3-sector eNodeB or as three independently deployed single sector eNodeBs with configuration flexibility in the MIMO order, carrier bandwidths and carrier aggregation options. The RAC card is band agnostic and can support TD-LTE or FD-LTE radios, with appropriate RRHs.

Customized Access Scheduling: Customizable scheduling profiles available for operator to optimize and prioritize throughput, latency, coverage or capacity on a per cell basis.

Backhaul Optimization: Optical backhaul can be integrated in order to maximize end-to-end LTE performance.

Technology
3GPP LTE eNodeB
3GPP Release 15 NSA*
Carriers
Dual carrier support up to 40 MHz per sector
Flexible multi-carrier options
Up to 30 carriers on the fully populated Baseband
MIMO
4X4 (TM1, TM2, TM3, TM4 supported)
Transmit power: 40W per port
Baseband to RRH Radio Interface
CPRI I&Q interface over 1310 nm Fibre
Up to 20 km, RAC to RRH
UE support
64 QAM uplink capable
2000 Connected UEs per Baseband card
Up to 500 connected UEs per Baseband card
Services include data, VoLTE with CSFB/ SRVCC with full mobility
Synchronization
GPS, IRNSS, IEEE 1588**
Backhaul
Two GigE SFP ports (optical or electrical)

Surge Protection
20KV built-in at RRH head end
Antenna Tilt
AISG 2.0 capable
Power Supply
Baseband: -48 V DC nominal, -36 V to -60 V Power consumption per slot < 75W
RRH: -48V DC nominal, -36V to -60V Power consumption per RRH <250W
Environmental and EMI-EMC
RAC Card <ul style="list-style-type: none"> • Operating Temperature: 0°C to 50°C • Relative Humidity: 5% to 95%, non-condensing • EN301489-1, 301489-19, 301489-23 • EN55022 Class A • FCC Part 15 Class • EN61000-4-2 to 4-6
RRH <ul style="list-style-type: none"> • Operating Temperature: -15°C to 55°C • Relative Humidity: 10% to 90%, non-condensing • Dust and Water Resistant as per IP67 • EN301489-1 • EN55022 Class A • EN61000-4-3 • CISPR 16-1-1, 1-2, 1-4, 2-1, 2-3, 2-4 • ETSI EN 301 908-14, TS 136 141