

TJ1400-7 Ultraflex BBU

Broadband Wireless Access

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



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TJ1400-7 Ultraflex BBU is a versatile, converged platform that seamlessly integrates 4G/5G RAN baseband functions with Carrier Ethernet backhaul — eliminating the need for a separate Cell Site Router. This all-in-one solution simplifies site architecture, reduces costs, and accelerates deployment timelines.

With a modular, chassis-based design, the TJ1400-7 Ultraflex enables **pay-as-you-grow** scalability. Each of its five band-agnostic modules supports three cells of 4T4R/2T2R, allowing up to 15 cells per platform — delivering high flexibility and performance for expanding networks.

TJ1400-7 Ultraflex BBU is a **compact, 2RU half-depth platform** compliant with 3GPP Release 15, featuring five versatile backhaul ports — two 10GE SFP+, two 1GE SFP, and one GE electrical port — for flexible deployment scenarios.

With integrated backhaul capabilities, the Ultraflex BBU **enables network resiliency** through a Fiber Ring Architecture. Leveraging an open ERPS ring protection scheme, it ensures high availability without relying on the control plane protocols of an overlaying IP/MPLS routing network.

Key Benefits

Unified architecture

Cell sites with fiber backhaul can seamlessly integrate transport and NR access, offering the advantages of unified OAM along with significant space and power savings.

Customized Access Scheduling

Operators can tailor scheduling profiles per cell to optimize key performance parameters throughput, latency, coverage, or capacity based on specific network requirements.

Flexible

Each Tributary card can act as a coordinated 3-sector gNodeB or eNodeB or as three independently deployed single sectors with configuration flexibility in the MIMO order & carrier bandwidths. The Tributary cards are band agnostic and can support radios, with appropriate RRHs

Backhaul Optimization

Integrated optical backhaul ensures high-performance, end-to-end connectivity, enabling efficient transport and enhanced network responsiveness.

Key Specifications

Technology	3GPP Release 15 Compliant; 3GPP RAT Types: LTE, NR (SA/NSA), NB-IoT
Supported Carrier Combinations	LTE: 15 cells, 20 MHz; NR: 6 cells, 20 MHz(FDD) or 4 cells, 40 MHz(TDD); LTE+NR: 9 cells, LTE 20 MHz + 6 cells, NR 20 MHz
MIMO	2x2 and 4x4
Baseband to RRH Interface	CPRI interface; CPRI Line Rates: 4.9 Gbps & 9.8 Gbps
Services	eMBB; VoLTE & VoNR; MCX Services; Carrier Mobility incl. CSFB & SRVCC
Modulation Scheme (DL/UL)	LTE: 256QAM DL & 64QAM UL; NR: 256QAM DL & 256QAM UL
Synchronization	GPS + IRNSS, IEEE 1588v2
Backhaul	2 × 10GE & 3 × 1GE Interfaces; 802.1Q, QoS, Policing, 802.1p to CoS Mapping; Ethernet Ring Protection (ERPS)

Environmental

Operating Temperature(C)	0°C to +55°C
Relative Humidity	5% to 95%
Input Voltage(V)	-40 V to -72 V
Power Consumption	~250W

Physical Specifications

Dimensions (HxWxD)	88mm × 444mm × 237mm
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