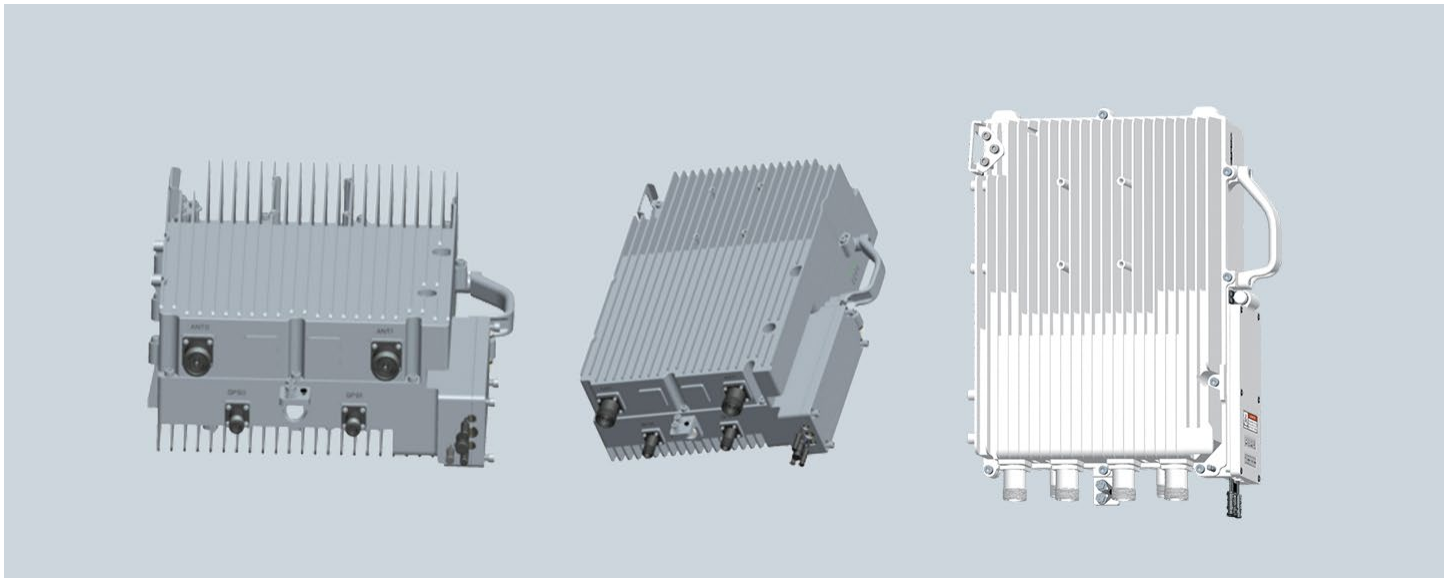


Nova-243 Outdoor TDD eNodeB



INTRODUCTION

The Baicells Nova-243 eNodeB (eNB) is an outdoor base station with 2*10W output power (2x2 MIMO with 10W output each channel). It is based on standardized Long-Term Evolution (LTE) Time Division Duplexing (TDD) technology.

This unit is compact, lightweight, and easy to deploy. The Nova-243 eNB offers excellent performance, helping operators to provide better coverage and higher capacity with minimal effort.

FEATURES

- Standard LTE TDD bands 41/42/p43/48 and customized (p = partial band)
- Peak rate 112 Mbps DL, 20 Mbps UL (20 MHz)
- Maximum 96 concurrent users
- 5/10/15/20 MHz bandwidth operation
- Higher transmission power for extended coverage
- Lower power consumption to reduce OPEX
- Any IP based backhaul can be used, including public transmission
- Plug-and-play with SON capabilities
- IoT with most EPC vendors
- Excellent NLOS coverage performance

- Local and Web GUI management and network management using Baicells Operations Management Console (OMC)

HARDWARE SPECIFICATIONS

LTE Mode	TDD
Frequency Bands	41/42/p43/48 and customized (p = partial band)
Channel Bandwidth	5/10/15/20 MHz
Max Output Power	40 dBm / antenna
Receiving Sensitivity	Band 41: -102 dBm Bands 42/p43/48: -101 dBm
Synchronization Mode	GPS 1588v2
Backhaul Mode	2 RJ-45 Ethernet interfaces (1 GE ea.)
MIMO	DL: 2x2
Dimensions (HxWxD)	17.3 x 9.5 x 5.5 inches 440 x 240 x 140 millimeters
Installation Method	Pole or wall mount
Antenna	External high-gain antenna
Power Consumption	<160W
Power	-48V DC, AC adaptor (multi-national standards)
Weight	26 lbs (12 kg)

Note 1: Different models support different frequencies.

Note 2: The test method of receiving sensitivity is proposed by the 3GPP TS 36.104, which is based on 5 MHz bandwidth, FRC A1-3 in Annex A.1 (QPSK, R=1/3, 25RB) standard.

SOFTWARE SPECIFICATIONS

LTE Standard	3GPP Release 9
Peak Rate	<ul style="list-style-type: none"> • 20 MHz: <ul style="list-style-type: none"> - SA1: DL 80 Mbps, UL 20 Mbps - SA2: DL 112 Mbps, UL 14 Mbps • 10 MHz: <ul style="list-style-type: none"> - SA1: DL 40 Mbps, UL 10 Mbps - SA2: DL 55 Mbps, UL 5 Mbs
User Capacity	96 concurrent
QoS Control	3GPP standard QCI
Modulation	UL: QPSK, 16QAM, 64QAM DL: QPSK, 16QAM, 64QAM
Voice Solution	CSFB, VoLTE, eSRVCC
Traffic Offload	<ul style="list-style-type: none"> • Local IP Access (LIPA) • Selected IIP Traffic Offload (SIPTO)
SON	Self-organizing network: <ul style="list-style-type: none"> • Automatic setup • Automatic Neighbor Relation (ANR) • PCI confliction detection
RAN Sharing	Supported
Network Management Interface	TR069 interface protocol
MTBF	≥ 150000 hours
MTTR	≤ 1 hour
Maintenance	Remote or local maintenance Online status management Performance statistics Fault management Local or remote software upgrade Logging Connectivity diagnosis Automatic start and configuration Alarm reporting KPI recording User information tracing Signaling trace

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40°F to 131°F -40°C to 55°C
Storage Temperature	-49°F to 158°F -45°C to 70°C
Humidity	5% to 95%
Atmospheric Pressure	70 kPa to 106 kPa
Ingress Protection Rating	IP66
Power Interface Lightning Protection	Differential Mode: ±10 KA Common Mode: ±20 KA

GLOBAL PART NUMBERS

BRU3501	Nova-243 10W eNB 3.5/3.65 GHz (3550-3700 MHz), Bands p42/p43 (IC certified) Note: p = partial band
BRU3510	Nova-243 10W eNB 2.5 GHz (2496-2690 MHz), Bands 41 (FCC/IC certified)
BRU3511	Nova-243 10W eNB 3.5 GHz (3400-3600 MHz), Band 42 (IC certified)