Nova-243 Outdoor TDD eNodeB

Baicells

INTRODUCTION

The Baicells Nova-243 eNodeB (eNB) is an outdoor Long-Term Evolution (LTE) product that operates in Time Division Duplexing (TDD) mode. This eNB provides users with high-speed broadband wireless access to the Internet using 2*10W output power (2x2 MIMO with 10W output each channel). 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.

The product comes with a standard one-year warranty; extended warranty is available.

FEATURES

Note: Features may vary based on model or region.

- Standard LTE TDD Bands 41/42/43/48
  - Customization may be requested; contact sales_na@baicells.com.
- 2.5 GHz or 3.5 GHz models
- Complies with 3GPP Release 9 standards
- GUI-based local and remote Web management
- TR069 network management interface support
- Any IP based backhaul can be used, including public transmission
- Lower power consumption to reduce OPEX
- Higher transmission power for extended coverage

- IoT with all mainstream LTE Evolved Packet Core (EPC) vendors
- Excellent non-line-of-sight (NLOS) coverage performance
- Peak rate (up to): DL 112 Mbps, UL 20 Mbps @ 20 MHz bandwidth
- 96 concurrent users

HARDWARE SPECIFICATIONS

LTE Mode	TDD
Frequency Bands	41/42/43/48 and customized
Channel Bandwidth	5/10/15/20 MHz
Max Output Power	40 dBm / antenna
Power Supply	-48V DC, AC adaptor (multi-national standards)
Power Consumption	< 160W
Receive Sensitivity	-101 dBm
Synchronization	GPS, 1588v2*
Interfaces	2 RJ-45 Ethernet interfaces (1 GE ea.)
MIMO	DL: 2x2
Installation	Pole or wall mount
Antenna Type	External high-gain antenna compatible with eNB N-Type connectors

Dimensions (HxWxD)	17.3 x 9.5 x 5.5 inches 440 x 240 x 140 millimeters
Weight	26 lbs / 12 kg

SOFTWARE SPECIFICATIONS

LTE Standard	3GPP Release 9

Peak Rate (up to)
 	
SA - Special Subframe Assignment (configurable parameter)
	20 MHz:
	  - SA0: DL 50 Mbps, UL 42 Mbps
	  - SA1: DL 80 Mbps, UL 20 Mbps
	  - SA2: DL 112 Mbps, UL 14 Mbps
	10 MHz:
	  - SA0: DL 25 Mbps, UL 21 Mbps
	  - SA1: DL 40 Mbps, UL 10 Mbps
	  - SA2: DL 55 Mbps, UL 5 Mbs

User Capacity	96 concurrent
QoS Control	3GPP standard QCI
Modulation	DL: QPSK, 16QAM, 64QAM UL: QPSK, 16QAM, 64QAM
Voice	VoLTE*
Traffic Offload	• Local IP Access (LIPA) • Selected IIP Traffic Offload (SIPTO)
SON	Self-organizing network: • Automatic setup • Automatic Neighbor Relation (ANR) • PCI confliction detection
RAN Sharing	Supported
Network Mgmt	TR069
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

*Future software release

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 outdoor TDD eNodeB - LTE Release 9, 2x10W (40 dBm), 2 port, 3.5 GHz, B42/43/48 • FCC certification: 2AG32BRU3501 (3400-3500 MHz) • IC certification: 20982-BRU3501 (3450-3700 MHz)
BRU3510	Nova-243 outdoor TDD eNodeB - LTE Release 9, 2x10W (40 dBm), 2 port, 2.5 GHz, B41 • FCC certification: 2AG32BRU3510 (2501-2685 MHz) • IC certification: 20982-BRU3510 (2500-2690 MHz)
BRU3511	Nova-243 outdoor TDD eNodeB - LTE Release 9, 2x10W (40 dBm), 2 port, 3.5 GHz, B42 • IC certification: 20982-BRU3511 (3450-3650 MHz)

Notes:

1 - Other models available for other regions. Contact sales_na@baicells.com.

2 - Customized versions may be requested.