BC-W2001



ONECELL® Baseband Controller 2000 Controller Module

- Pooled baseband processing with centralized scheduler
- Smart Reuse for multi-sector throughput without border handovers or interference
- Single PCI across multiple Radio Points
- Joint Transmission and Reception
- No borders or handovers within controller

Product Classification

 Product Type
 Controller unit

 Product Brand
 ONECELL®

General Specifications

Technology LTE MIMO

Application

LTE delivery for public venues and large enterprises

Backhaul Interface

Enterprise broadband connection fiber, cable or DSL

Backhaul Security

IKEv2/IPSec with certificate mutual authentication

Boot and Storage SecuritySecure Boot, Secure Storage (TrE)

Cell Virtualization Reuse Factor

Up to 4 virtual cells per physical cell, depending on channel bandwidth,

deployment topology and usage.

Controller to RP Management Security HTTPS/SSL PSK

Core Network Interface S1-MME & S1-U

Coverage Area Up to 1,000,000 square feet

Coverage Area Note Depending on frequency bands, channel bandwidth and building characteristics

 DMS to Controller Management Security
 HTTPS/SSL (cert)

 Fronthaul and OTA Security
 PDCP ciphering

 Fronthaul Interface
 IP Ethernet LAN

Modulation Type DL: QPSK, 16QAM, 64QAM | UL: QPSK, 16QAM

Note Two controller modules fit into one 1RU 19-inch chassis

Physical Interface 2x 10 GigE SFP+ Optical or Electrical | 4x GigE SFP Optical or

Electrical | 7x GigE Electrical (10/100/1000)

Physical Sector Peak Throughput, uplink 50 Mb/s
Simultaneous RRC Connected Users 512

COMMSC PE°

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Timing and Synchronization GPS via SMA connector | IEEE 1588 v2 PTP

Virtual Sectors and Systems, maximum 4

Dimensions

 Height
 44 mm | 1.732 in

 Width
 242 mm | 9.528 in

 Depth
 476 mm | 18.74 in

Electrical Specifications

Input Current, maximum, specific .85 A | 1.7 A

Input Voltage Range 120/230 Vac - 50/60 Hz
Electrical Safety Standard IEC 60950-1 Second Edition

Electromagnetic Compatibility (EMC) 47CFR Part 15 (CFR 47) Class A | EN 55022, 2010/AC:2011 Class A | EN

55024, 2010 ITE | ICES-003, Issue 5 Class A

Power Consumption 100 W

Mechanical Specifications

Transportation Vibration Standard ISTA-3A

Environmental Specifications

Operating Temperature 0 °C to +40 °C (+32 °F to +104 °F)

Packaging and Weights

Weight, net 5.9 kg | 13.007 lb

Regulatory Compliance/Certifications

Agency Classification

CE Compliant with the relevant CE product directives

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