



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

Brand	OneCell®
Product Type	Controller unit

General Specifications

Application	LTE delivery for public venues and large enterprises
Backhaul Interface	Enterprise broadband connection fiber, cable or DSL
Core Network Interface	S1-MME & S1-U
Fronthaul Interface	IP Ethernet LAN
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)

Electrical Specifications

Electrical Safety Standard	IEC 60950-1 Second Edition
Electromagnetic Compatibility (EMC)	EN 55022, 2010/AC:2011 Class A EN 55024, 2010 ITE ICES-003, Issue 5 Class A 47CFR Part 15 (CFR 47) Class A
Input Current, maximum, specific	.85 A 1.7 A
Input Voltage Range	120/230 Vac - 50/60 Hz
Power Consumption	100 W

Radio Specifications

Cell Virtualization Reuse Factor	Up to 4 virtual cells per physical cell, depending on channel bandwidth, deployment topology and usage.
Coverage Area	Up to 1,000,000 square feet
Coverage Area Note	Depending on frequency bands, channel bandwidth and building characteristics
Modulation Type	DL: QPSK, 16QAM, 64QAM UL: QPSK, 16QAM
Physical Sector Peak Throughput, uplink	50 Mb/s
Simultaneous RRC Connected Users	512
Technology	LTE MIMO
Timing and Synchronization	GPS via SMA connector IEEE 1588 v2 PTP
Virtual Sectors and Systems, maximum	4

Security Specifications

Backhaul Security	IKEv2/IPSec with certificate mutual authentication
Boot and Storage Security	Secure Boot, Secure Storage (TrE)
Controller to RP Management Security	HTTPS/SSL PSK
DMS to Controller Management Security	HTTPS/SSL (cert)
Fronthaul and OTA Security	PDCP ciphering

Environmental Specifications

Operating Temperature	0 °C to +40 °C (+32 °F to +104 °F)
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Industry And Government Compliance

Transportation Vibration Standard	ISTA-3A
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Dimensions

Depth	476.00 mm 18.74 in
Height	44.00 mm 1.73 in
Net Weight	5.90 kg 13.01 lb
Width	242.00 mm 9.53 in

Regulatory Compliance/Certifications

Agency	Classification
RoHS 6/6 EU	Compliant
CE	Compliant with the relevant CE product directives, Declaration of Conformity (DoC) available

