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 Security** Secure 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
### 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
- **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**: CE
- **Classification**: Compliant with the relevant CE product directives