

Enterprise Access Point



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- Subscriber access: up to 64 active LTE users
- Voice over LTE
- Multi-operator support
- Throughput:
 - Up to 150/50 Mbps DL/UL at 20MHz
 - Up to 300/75 Mbps with Carrier Aggregation
- Connectivity: Ethernet Cat.5e
- Mounting options: Wall or ceiling mount
- Power: Power over Ethernet (PoE+) + optional 48V DC power
- Zero Touch activation

Band Support Configurations

Band 7

- Uplink (UL) 2,500 – 2,570 MHz
- Downlink (DL) 2,620 – 2,690 MHz
- Duplex mode FDD
- Channel widths 5, 10, 15, 20 MHz

Band 1

- Uplink (UL) 1,920 – 1,980 MHz
- Downlink (DL) 2,110 – 2,170 MHz
- Duplex mode FDD
- Channel widths 5, 10, 15, 20 MHz

Band 2

- Uplink (UL) 1,850 – 1,910 MHz
- Downlink (DL) 1,930 – 1,990 MHz
- Duplex mode FDD
- Channel widths 5, 10, 15, 20 MHz

Band 4

- Uplink (UL) 1,710 – 1,755 MHz
- Downlink (DL) 2,110 – 2,155 MHz
- Duplex mode FDD
- Channel widths 5, 10, 15, and 20 MHz

Industry Context

Luminate Wireless is transforming the capacity and capabilities of mobile networks using web-scale computing and cloud-enabled networking.

Today's mobile networks are taxed by exponential growth in traffic and capacity, requiring costly upgrades. Existing mobile networking solutions are built on proprietary hardware platforms that are inflexible and expensive to deploy and manage. At the same time, consumer revenue is compressing, making higher-margin enterprise revenue streams highly desirable. However, service creation for enterprises or verticals is difficult in current mobile network architectures, thereby impeding revenue creation.

Luminate Enterprise Access Point

Luminate's Enterprise Access Point (LEAP) is a new generation of services-ready licensed/unlicensed access points that are Ethernet plug-and-connect ready equipment for deployment with enterprise customers of any size. LEAP is services-ready and enables rapid cloud activation and provisioning of assured mobile services to enterprises of any size. Luminate's first commercial LEAP supports up to 64 active LTE users with throughput up to 300 Mbps downlink and 75 Mbps uplink using 20 MHz channel bandwidth and carrier aggregation. Each AP connects to the mobile core using basic Cat.5e running over existing Ethernet with access to existing IP backhaul. Luminate Insight™, an advanced cloud management system, offers easy portal access and makes deployments easy with cloud activation. The integrated management system supports operator, system integrator and enterprise views to facilitate an appropriate level of control and visibility for all stakeholders. With Luminate's SONx (Self Organizing and optimizing Network with advanced X2GW co-location features), dense and multi-tenant deployments of APs is easier and more manageable than previous generation LTE Access Points.

Luminate's cloud-enabled mobile network enables new subscriber revenues using real-time information to offer local analytics, mobile and unified communications, smart building, presence and context-based services. With Luminate Wireless, mobile operators and business partners benefit from a web-scale distributed systems approach to realize elasticity and resiliency to address the \$100 billion enterprise market opportunity.

Access Point Specifications

- LTE 150Mbps UL/50Mbps DL (FDD)
- Carrier Aggregation: Up to 300/75 Mbps
- Chipsets: 2x2 MIMO
- Weight: 1.6 kg (56 oz) with mount adaptor
 - 267 mm (W) x 267 mm (D) x 54mm (H),
10.47" (W) x 10.47" (D) x 2.1" (H)
- Transmit power up to +24 dBm
- 10MHz Rx sensitivity: -100 dBm (QPSK rate 1/3)
- Internal antenna gain: up to 1 dBi
- GPS
- Power
 - Maximum power consumption
(Excluding power drawn by external
USB device): 21W
 - Primary: PoE 802.3at PoE
 - Secondary: 48V DC power adaptor

External Interfaces

- Two 10/100/1000Base-T auto-sensing MDI/MDX Gb Ethernet (GE) ports: 2x 10/100/1000Base-T auto-sensing MDI/MDX wired network connectivity port
- IEEE 802.3ab 1000BaseT Gigabit Ethernet (GE)
- IEEE 802.3at Power over Ethernet
- IEEE 1588-2008 v2 Precision Time Protocol for clock synchronization throughout the LAN
- USB host interface: 1.0/1.1 and 2.0
- RS-232 serial interface for out-of-band management using micro-AB USB

Visual Indicators (LED): 5

- Power system status
- Ethernet status: E0, E1
- Radio status: RAD0, RAD1

Certifications

- Country specific certifications

Memory/Storage

- 4GB of DDR3 SDRAM for storage, configuration and applications
- 4GB of eMMC flash

Environmental

- Operating conditions:
 - Temperature: 0° C to +50° C
(+32° F to +122° F)
 - Humidity: 5% to 95% non-condensing
- Storage conditions:
 - Storage temperature: -40° C to +70° C
(-40° F to +158° F)
 - Storage humidity: 5% to 95% non-condensing
- RoHS 2002/95/EC compliant; manufactured of non-hazardous materials (RoHS 6 compliant)
- Plenum rated UL 2043

Physical Security

- Kensington MicroSaver lock

Security Certificates

- TPM (Trusted Platform Module)

Security Audit

- Available upon request

Regulatory

- ETSI: EN 301 489-1, 301 489-23, 301 908-1&3, EN 50385, EN 60950-1 (safety)
- FCC: Part 15 Class A
- MTBF of 150,000 hours+. Telcordia SR-332, Reliability Prediction Procedures for Electronic Equipment, Issue 3, Method 1, Case 3, GB/GC (Ground Benign, Controlled) environment, 25°C ambient temperature