



Ultima 3

within reach, beyond imagination

www.eionwireless.com



Built on eight years of field-proven patented MC-DSSS (Multi-Code Direct Sequence Spread Spectrum) wireless technology, the Ultima3 is the only complete solution you need for deploying a high-speed wireless network.

With its superior range, the Ultima 3 product family enables suburban and rural applications that other wireless solutions can only dream about. In addition, optimizations for VoIP and hotspot backhaul applications extend the range of solutions that can be implemented using the Ultima3. The Ultima 3 is a cost-effective solution with comprehensive network features that allows you to meet your business objectives.

- Exceptional coverage area (38 km in Point-to-Multipoint or 75 km in Point-to-Point)
- Patented MC-DSSS (Multi-Code Direct Sequence Spread Spectrum) improves the spectral efficiency
- Up to six-sector design delivers a true broadband solution of 72 Mbps.
- High quality and excellent support guarantee the end users peace of mind on their investment.
- VoIP optimization offers tomorrow's networks for today's applications.
- Operating in the 5.8 GHz ISM band requires no licensing fee.
- Multi-layer security guarantees safe data transmission over the air.
- Fully integrated design in an extreme weatherproof enclosure
- Efficient bandwidth allocation makes a wireless network highly scalable.

ULTIMA 3 MULTI-POINT FAMILY

The Ultima 3 Multipoint Product (MP) family includes three product types, Access Point (AP), CPE (Customer Premises Equipment) and LCPE (Long-range Customer Premises Equipment). From a single AP, the MP family provides broadband coverage of up to 38 km (24 miles) to a maximum of 1000 CPEs or LCPEs. Along with a maximum aggregated throughput of 72 Mbps, the rich network features, such as QoS, MBR/CIR and VLAN compliance, make the MP family ideal for WISP (Wireless Internet Service Provider) and enterprise applications.

ULTIMA 3 POINT-TO-POINT FAMILY

The Ultima 3 Point-to-Point (PP) family also includes three product types, Rapid Deployment (RD), Extended Range (ER) and Short Range (SR). Delivering a throughput of 12 Mbps and a distance of up to 75 km, the PP family offers a very competitive alternative for backhaul applications.

PROVEN

The Ultima 3 product line is built on eight years of Fixed Wireless Access (FWA) experience and the feedback obtained from thousands of networks deployed worldwide. The Ultima3 products have been used by many major telcos around the world because of its unmatched maturity and superior performance.

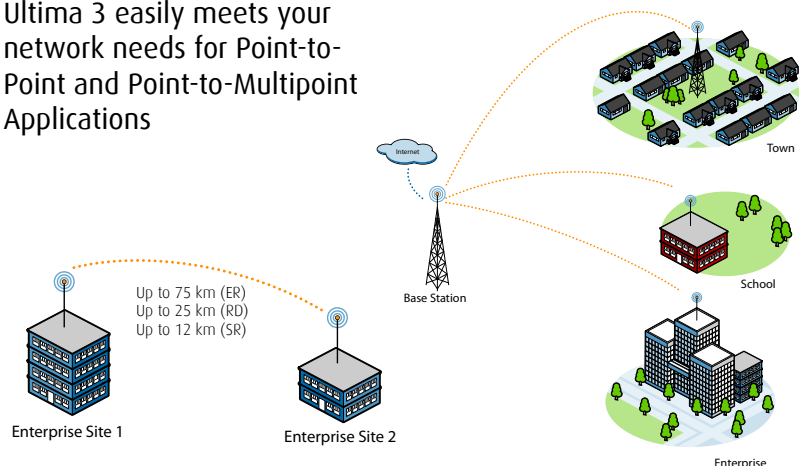
SCALABLE

A broad range of antennas allows users to grow their network in a flexible manner. Start with a single omni-antenna at the base station, divide into a sectored cell and ultimately expand to multiple cells to satisfy all the network growth requirements.

ROBUST

Like its ancestors, the Ultima 3 is recognized as a "mission critical" product by the industry. The superb quality of the Ultima 3, along with EION's first class support is the guarantee of our customers' investment.

Ultima 3 easily meets your network needs for Point-to-Point and Point-to-Multipoint Applications



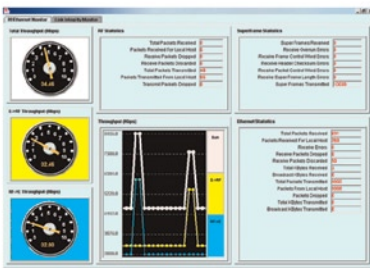


SECURE

The Ultima3 is inherently secure due to its DSSS military origin. Patented MCDSSS technology includes physical layer data scrambling, proprietary data formatting, and special access passwords. Together with RF Grouping, IP Filtering and VLAN, this multi-layer security approach make the Ultima 3 the right choice for high security applications.

EASE OF USE

A rugged, weatherproof design eliminates bulky coax cable and accessories while allowing the Ultima 3 to be mounted outdoor as well as indoor. A standard off-the-shelf alignment tool makes installation and link set up fast and easy. Ultima 3 Web GUI, SNMP and cloning capabilities allow for network operation and maintenance from anywhere in a network.



Web-based GUI

RADIO SPECIFICATIONS

	POINT-TO-POINT	POINT-TO-MULTIPOINT
Output Power (Antenna Port)	-10 dBm to +21 dBm (RD/ER) -10 dBm to +15 dBm (SR)	-10 dBm to +21 dBm
Frequency Range	5.725 to 5.850 GHz	5.725 to 5.850 GHz
Technology	MC-DSSS	MC-DSSS
Coverage	LOS	LOS
Range	Up to 75 km (45 miles)	Up to 38 km (24 miles)
Cell Configuration	N/A	Up to 6 sectors
Throughput (Raw/Effective)	12 / 10 Mbps	12 / 10 Mbps
Receive Sensitivity (at 10E-6 BER)	-80 dBm	-80 dBm
Channel Size/Separation	33 MHz	33 MHz
Integrated Antenna	SR/RD: 23 dBi	CPE: 23 dBi
RF Connector	ER: 'N' type	AP/LCPE: 'N' type
Duplexing Format	TDD	TDD
Certification	FCC/IC/SRRC	FCC/IC/SRRC

NETWORK SUPPORT

Network Connection	10/100 BaseT	10/100 BaseT
VLAN (802.1q) Compliance	Yes	Yes
CIR/MBR	Yes	Yes
Bridge functionality	Yes	Yes
Network Filtering	IP/MAC address filtering	IP/MAC address filtering
QoS	802.1q	802.1q

WIRELESS NETWORKING

Network Topologies	Point-to-Point	Point-to-Multipoint
RF Protocol	Polling with Dynamic Time Allocation (DTA)	Dynamic Polling with Dynamic Time Allocation (DTA)
No. of CPEs per AP	-	1000

SECURITY

Data Scrambling	User Configurable, up to 4 x 10 ⁹	User Configurable, up to 4 x 10 ⁹
Data Security Password	20 Byte Security password (>10 ⁴⁸ Combinations)	20 Byte Security password (>10 ⁴⁸ Combinations)
Configuration Security	Password Protected	Password Protected

MANAGEMENT

Remote Management	SNMP, TELNET, Web GUI	SNMP, TELNET, Web GUI
Remote Management Access	Wireless/Wire	Wireless/Wire
Local Management Port	RS 232 Serial Port	RS 232 Serial Port
Software Upgrade	Over the Air/Local	Over the Air/Local

PHYSICAL, ELECTRICAL AND ENVIRONMENTAL

Power Consumption	Max 14 W	Max 14 W
Input Voltage	19-24 V	19-24 V
Dimensions	ER: 191 x 76 x 229 mm (7.5 x 3.0 x 9.0") RD/SR: 305 x 89 x 305 mm (12.0 x 3.5 x 12.0")	AP: 191 x 76 x 229 mm (7.5 x 3.0 x 9.0") CPE: 305 x 89 x 305 mm (12.0 x 3.5 x 12.0") LCPE: 191 x 76 x 229 mm (7.5 x 3.0 x 9.0")
Weight	ER: 3.0 kg (6.6 lb) RD/SR: 3.6 kg (7.9 lb)	AP/LCPE: 3.0 kg (6.6 lb) CPE: 3.6 kg (7.9 lb)
Operating Temperature	-40° C to 60° C	-40° C to 60° C
Relative Humidity	0-95% (non-condensing)	0-95% (non-condensing)
Enclosure	Fully weather proof	Fully weather proof

Corporate Headquarters

945 Wellington Street
Ottawa, ON K1Y 2X5
Canada
Phone: +1 (613) 715-9067
Fax: +1 (613) 722-0039

Calgary Office

2923 - 5th Avenue NE
Calgary, AB T2A 6T8
Canada
Toll Free (North America)
+1 (866) 346-6555

EION Wireless, a division of EION Inc., is a global provider of Broadband Wireless Access products that enable effective, economic and secure wireless high-speed communications solutions. The company's licensed and unlicensed frequency products are used by wireless ISPs, private network operators, and remote rural networks and in voice and data backhaul applications to solve last mile challenges. EION Wireless works with more than 165 local partners to support its diverse global customer base and provide innovative and reliable solutions.

