StarPlus 1130
MIMO CPE, IP67 Ruggedized Enclosure

IP67

RUGGED

CPE

OVERVIEW

EION's StarPlus 1130 CPE is a high-power, high-performance ruggedized outdoor subscriber station for deployments where extended range is a requirement. StarPlus 1130 uses EION's proprietary TrustLink technology, which is built on more than a decade of OFDM experience, to reduce interference and increase throughput.

With its high spectral efficiency, large capacity, user friendly GUI and rich feature-set, StarPlus is the ideal unlicensed wireless solution for rural and metropolitan broadband requirements.

TRUSTLINK ADVANTAGE

TrustLink™ technology ensures equitable distribution of traffic to all subscriber stations and uses intelligence to determine the number of polling cycles every user gets depending on the level of its activity. This way the network resources are not wasted during the polling of inactive users due to no user data transmission. TrustLink can be employed in both point-to-point and point-to-multipoint networks and dramatically reduces the effects of unwanted interference on the wireless link.

PRODUCT FEATURES

- EION TrustLink™ Technology

- 2x2 MIMO

- 5.x GHz extended frequency range from 4.920 to 6.100 GHz

- Rugged construction for all weather conditions

- High spectral efficiency and robust RF network performance

- Real Time RSSI alignment indicator

- Backward compatible with EION LibraPlus 5860 APs

- Up to 300 Mbps data rate over the air, maximum ethernet throughput is 100 Mbps

- OFDM technology provides NLOS coverage in urban environments

- User friendly web-based GUI

- SNMP v2c and enterprise MIB for advanced network management

- 40 MHz Turbo channel size

- 20 MHz Normal channel size

- 5 & 10 MHz Narrow band channel sizes

- Built-in lightning, power surge PoE protection, high EMI immunity

Product Name	Product Description	Product Code
StarPlus 1130-58	5 GHz StarPlus CPE, OFDM MIMO 300 Mbps, 2x N-Type Connector	1130-58-10-00

Radio	StarPlus 1130-58				
Topology	Point-to Multipoint CPE				
Diversity	2 × 2 MIMO				
Frequency*	4.920 to 6.100 GHz				
Channel Size*	Quarter: 5 MHz; Half: 10 MHz; Normal: 20 MHz; Turbo: 40 MHz				
Channel Spacing	5 MHz × channel number for CF				
Modulation	MCS 0 to 15 (6.5 to 300 Mbps); BPSK, QPSK, 16-QAM and 64-QAM for LibraPlus mode (6Mbps - 54Mbps)				
Antenna	2 × N-type female				
Output Power†	+29 dBm aggregate; 2 × 26 dBm per stream (configurable from 9 dBm up to license key limit in 1 dB steps)				
Receiver Sensitivity (BER = 10⁻⁶) +/- 2dB		Modulation	5 MHz	10 MHz	20 MHz	40 MHz
	MCS0/8	BPSK	-101 dBm	-98 dBm	-95 dBm	-92 dBm
	MCS1/9	QPSK1/2	-99 dBm	-96 dBm	-93 dBm	-90 dBm
	MCS2/10	QPSK3/4	-96 dBm	-93 dBm	-90 dBm	-87 dBm
	MCS3/11	16-QAM1/2	-95 dBm	-92 dBm	-89 dBm	-84 dBm
	MCS4/12	16-QAM2/3	-91 dBm	-88 dBm	-85 dBm	-81 dBm
	MCS5/13	64-QAM2/3	-87 dBm	-84 dBm	-81 dBm	-77 dBm
	MCS6/14	64-QAM3/4	-85 dBm	-82 dBm	-79 dBm	-76 dBm
	MCS7/15	64-QAM5/6	-81 dBm	-78 dBm	-75 dBm	-74 dBm
Duplexing Format	TDD, Half-Duplex				
Radio Feature Support	Dynamic Frequency Selection (DFS)				
Spectral Efficiency	6.5 bits per Hertz				

Network Support	
Medium Access Control	Proprietary MAC, TrustLink™
Network Connection	10/100 Base T Auto-negotiation or configurable for full/half dulplex
Operational Mode	Transparent Bridging, Multicast
Traffic Management	Advanced QoS with multiple service flows and classifier priorities - VLAN ID (802.1q), VLAN Priority (802.1p) and DSCP/ToS
Fast Frame Aggregation	Yes
Sector Locking	Yes, configurable black or white Access Control Lists
VLAN	Data Tagging/Untagging, 802.1q transparency, VLAN Management, QinQ
Intra-sector Bridging	Yes
NAT	1:N NAT configurable through CPE GUI
DHCP	DHCP server for LAN devices when in NAT mode
IPv6	IPv6 pass through enabled when CPE works in bridge mode, Tunneling in NAT mode

Wireless Networking	
Output Power Management	Yes
Data Rate Selection	Yes

Security	
Management Access	Username and Password
Encryption	WEP (64, 128, 154), WPA1 (TKIP), WPA2 (CCMP - AES 128, CBC-MAC for headers)

Management	
Remote Management	Web-GUI, SNMP v2c (Set, Get and Traps with proprietary MIB)
Management IP	DHCP client or static IP
Installation Management	RSSI Indicator, Wireless Link Monitor, Audible Antenna Alignment Beeper, Built-in Spectrum Analyzer
Backup Configuration	Save Radio Configuration to local PC
Software Upgrade	Over the Air, local, Web-based upgrade, Dual bank to allow rollback
Ease of Use	Single management view of all deployed products in EION Constellation centralized management system

Physical, Electrical & Environmental	
Power Consumption	< 10 W
Input Voltage	100-240V, 50/60 Hz AC with 48V PoE 802.3af; DC Power option available
Temperature Range	Operating: -30° C to +70° C
Relative Humidity	0 to 100%, condensing
Mounting Bracket	Yes, 2-Axis pole/wall
Enclosure	Single Unit, Die Cast NEMA 4x; IP67
Weight	2.0 kg
Dimensions	230 mm × 230 mm × 65 mm
Certifications	FCC, IC, WPC, RoHS and WEEE
Lightning Protection	Integrated, Telcordia GR-1089 compliant (Meets IEC 61000-4-2/ 4-4)

† Maximum power output is set by country specific licensing key. The operator of this product must ensure compliance when selecting external antennas with the limits specified by local regulation prior to deployment
* Frequency bands that are available to the operator are determined by country specific licensing key.

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INTELLIGENCE IN THE AIR