SESWAVE-E1

IEEE 802.11a/b/g High Power Outdoor E1 Wireless Transmission System

Key Features

- Transmitting framed and non framed E1 signal through IP network.
- Divided into Outdoor unit and Indoor unit.
- Adjustable RF Output power, Up to 27dBm
- 108Mbps; 9 times faster than IEEE 802.11b standard
- Dual Frequency Radio 802.11a/b/g
- Point to point transmitted voice.
- Channel support : North America, Europe, Japan
- Non Line of sight (NLOS) and line of Sight (LOS) Deployments
- User friendly Web GUI for Device Configuration
- General UTP Ethernet interface, 10M/100M auto-negotiation.
- VOIP-Friendly QOS mechanism
- Auto rate fallback in case of obstacles or interferences
- Supports WPA / WPA2 security enhanced function
- Supports WDS(Wireless Distributed System) bridge mode
- Provides station mode to act as a wireless LAN client station
- Supports roaming link integrity
- Supports authentication for wireless connectivity based on ESSID
- Provides 64/128 bit key length WEP data encryption
- POE built-in for single cable installation
- Working in the wireless environment same as microwave transfers sets but costing 1/4 of those.
- High performance bridge for 10Base-T Ethernet extension
- Fully compatible with IEEE 802.3 and Ethernet Standards
- E1 channel: with both framed & unframed, both 75 & 120ohm
- Allow transmitting and receiving VLAN data packet
- 15000 frames per second filtering and forwarding rate
- 1000 MAC address LAN table, and automatic LAN table learning and aging.
- Standalone and Module optional

Benefits

Sesami SESWAVE-E1 is a High Power Outdoor E1 Wireless Transmission System specially designed for Telecom Service Provider applications in any harsh environments. It is not just an N-in-1 box, but employs up to 24dBm (250mW) 802.11a, 27dBm (500mW) 802.11b/g RF Output Power which enables Telecom Service Provider to reach more customers in broader area. For today's competitive telecom market, SESWAVE-E1 is able to transmit framed and non framed E1 signal through IP network. Divided into Outdoor unit and Indoor unit, SESWAVE-E1 outdoor unit works on 2.4GHz / 5.8GHz frequency, complied with IEEE802.11a/b/g protocol. It can offer reliable and high speed of data transmission up to 108Mbps (Super G) and especially powerful at bridge function. Using OFDM technology builds the feature of higher transmission efficiency, higher sensitivity and farther transmission distance etc. Using outdoor design and External antenna make it easily to install. By enabling cell telecom manager, corporations and ISPs to bridge the gap between multiple buildings, you will not incur the expense of leased lines or fiber runs. SESWAVE-E1, indoor unit is able to bidirectionally transparently run one E1-line or two E1-lines across the packet-switched network.. Supported UDP/TCP. Addressing of packet-switched is based on IP address, so these packets can pass through Hub and Router etc.

SESWAVE-E1 is an ideal solution encompassing the flexible deployment, high security, lower TCO, and ease-of-use advantages.

Faster Speed & Lower Total Cost

Featuring advanced OFDM technology, 802.11g is a field proven standard effectively provides higher speed wireless connection, around 5 times faster, than 802.11b can do. TSP can have different subscription programs based on the link speed, and charge the subscribers on the criteria. It's no need to use high-gain antenna just for reaching farer places. The high-gain antenna is always one of the major cost items while doing integration. With lower power WLAN boards, System Integrators always need to acquire higher-gain antenna which means much more outgoing cash flow. Utilizing the SESWAVE-E1 can effectively lower down the total cost to a reasonable level.

Rich Features Software

More than just an N-in-1 WLAN product, SESWAVE-E1 provides rich features software including most advanced security mechanism, WPA2, very flexible bandwidth management and packet prioritizing that ensure real time multimedia communication can be done in Wireless LAN environment, such as the hottest VoIP.

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Specification - Outdoor Unit

WLAN Standard	Wireless: IEEE 802.11a/b/g Ethernet: IEEE 802.3/u (10/100BaseTx)
Emission Type	DSSS / OFDM
Frequency Range	IEEE802.11a: 5150 MHz - 5250 MHz (Japan) 5150 MHz- 5350 MHz /5470 MHz—5725 MHz (Europe) 5150 MHz - 5350 MHz / 5725 MHz—5850 MHz (USA) IEEE802.11b/g: 2412 ~ 2462 MHz (N.A) 2412 ~ 2472`MHz (EU) 2412 ~ 2484 MHz (Japan) * (Country dependant)
Number of Channels	IEEE802.11a : 4 Channels (Japan) 19 Channels (Europe) 13 Channels (USA) IEEE802.11g/b : 14 Channels (Japan) 13 Channels (Europe) 11 Channels (USA)
RF Output Power	IEEE802.11a: 23dBm Max (Adjustable) IEEE802.11g/b: 27dBm Max (Adjustable)
Data Rate	802.11g: 54 / 48 / 36 / 24 / 12 / 9 / 6 Mbps 802.11b: 11 / 5.5 / 2 / 1 Mbps 802.11a: 108Mbps
Sensitivity	IEEE 802.11b: 1, 2 Mbps (BPSK, QPSK): - 96dBm 11 Mbps (CCK): -91dBm IEEE 802.11a/g: 54Mpbs (64QAM): -74dbm 48Mbps (64QAM): -76dbm 36Mpbs (16QAM): -78dbm 24Mbps (16QAM): -80dbm 18Mbps (QPSK): -81dbm 12Mpbs (QPSK): -82dbm 9Mbps (BPSK): -85dbm 6Mbps (BPSK): -91dbm
Hard Ware Chipset	CPU/BB/MAC: Atheros 2313 Radio: Atheros 5112(2112)
Hard Ware - Memory	Flash: 8MB SDRAM: 32MB
Operating Mode	Point-to-Point, Point-to-Multi Point Bridge Access Point AP Client (Ethernet to WLAN Bridge) Wireless Repeater Wireless Router AP Client with Routing function (WISP Mode) Universal Repeater
Frequency Stability	Within ±25 ppm
Data Modulation Type	BPSK, QPSK, CCK and OFDM
Standards & Protocol	802.3/u: 10/100 Mbps Fast Ethernet, IP v4, UDP, ICMP, TCP Routing: RIPv1, RIPv2 Secure: PAP, CHAP Network Timing Protocol, DHCP, DDNS, PPPoE, UPnP
Security	WEP 64/128 , 802.1X support Wi-Fi Protected Access (WPA) WPA-PSK, WPA II SSID Broadcast Disable function Firewall: MAC Filter IP Filter VPN Pass through: IPsec; PPTP Thermal display
Configuration & Management	Web-Based Configuration TFTP for software upgrade available Syslog SNMP: MIBII v1,2,3 Support alias IP
Operating Environment	Temperature -30° C ~ 70°C Humidity Up to 95% (non-condensing)
Antenna	N(F) Connector EXT Type
Power Supply	100-240VAC, 50/60Hz～ 48VDC/0.4A Compliant to IEEE802.3af
Other Integration	Power Over Ethernet on Board Lightning Arrestor on board Hardware heating sensor

Specification - Indoor Unit

Physical Port Type	RJ-45
Port Rate	10/100Mbps
Working Mode	Full semi-duplex, 10/100M auto-negotiation supporting IEEE802.3 Compatible on Full/Half duplex topology
E1 - Standard	ITU G.703, G.704
E1- Jitter Performance	According to ITU G.823
E1- Input Rate Range	2.048Mbps ± 50ppm
E1 -Port Code Type	HDB3
E1- Impedance	75Ωunbalanced Supporting: G.703
Working Environments	Temperature operating range: 0～50℃ Relative humidity: 20～90%
Store Environment	Environmental temperature: -20～65℃ Relative humidity: 10～95%
AC Power	Voltage range: AC 220V+-20% Power consumption: <3W
DC Power	-48V

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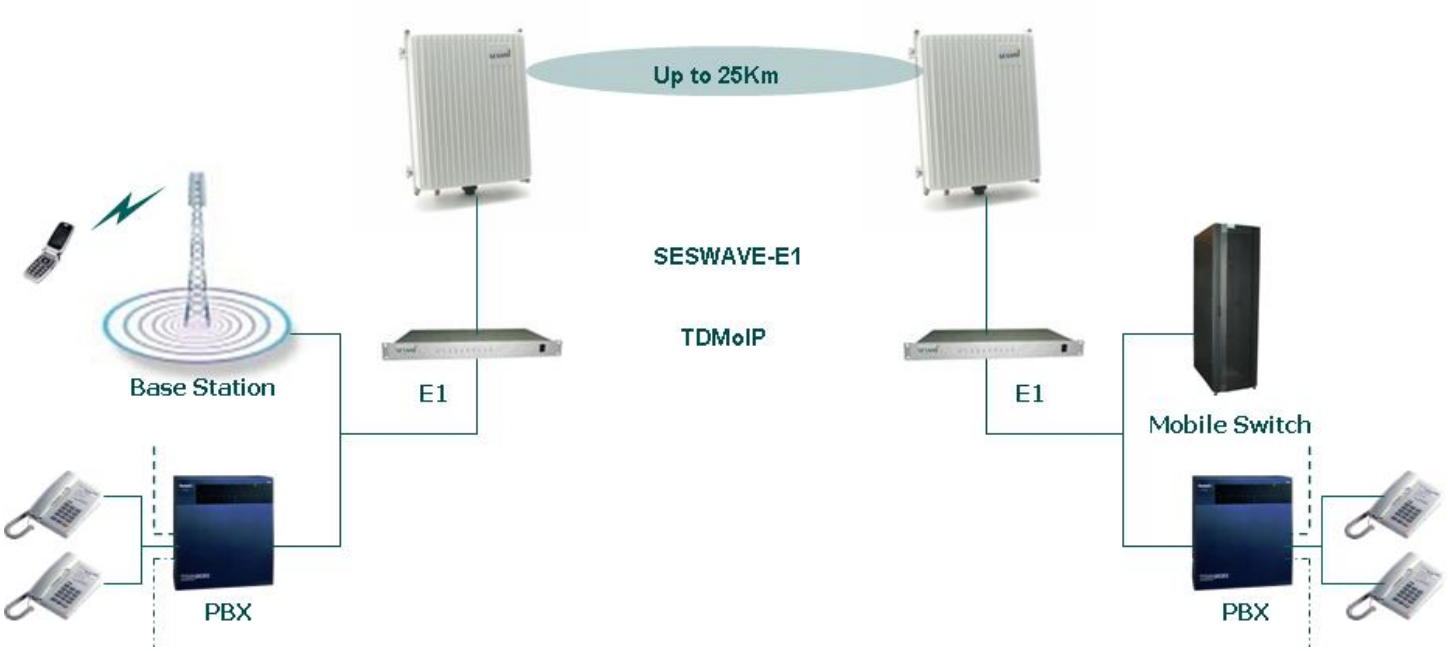
Application – E1 Wireless Connectivity



Package Content – Outdoor Unit

- SESWAVE-E1 Outdoor Bridge - 1
- Power Adapter + Power Cord - 1
- RJ-45 Waterproof Hat -1
- DC Injector -1
- Fixed Setting -1
- CD with User Guide -1

Package Content – Indoor Unit

- SESWAVE-E1 Indoor Unit - 1
- Power Line - 1
- Date Line - 1
- Connector - 1

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