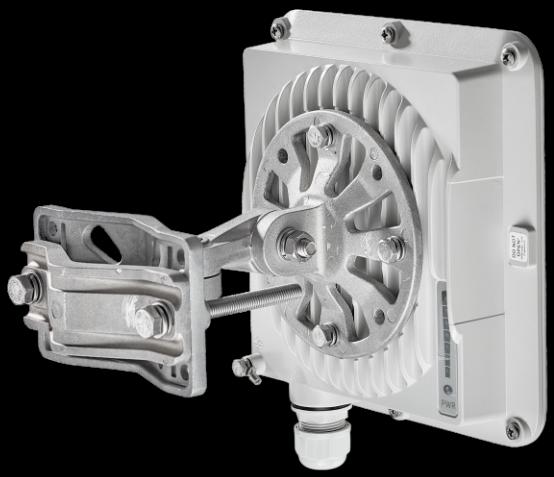
Astrawireless Evolution E6-STE

PRODUCT DATASHEET



Description	Evolution E6-STE, 5+6 GHz subscriber terminal, with 2x N-type (F) connectors
Antenna	2x N-type (F) connectors for external antenna
Recommended distance	30+ km
Frequency range	4900-6425 MHz
Channel width	10, 20, 40, 80 MHz
Net throughput	Up to 670/780^{hp} Mbps in 80 MHz Up to 370/380^{hp} Mbps in 40 MHz Up to 160/165^{hp} Mbps in 20 MHz
Packet performance	Up to 200 000 pps
Transmit power^{eirp}	From -5 to 25 dBm From -5 to 27 dBm^{hp}
Receiver sensitivity	Down to -91 dBm Down to -93 dBm^{hp}
Center frequency adjustment step	1 MHz

^{hp} - is a high-power device with an extended energy characteristic and increased throughput

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Wired Interfaces	1x GigabitEthernet
Duplex scheme	TDD
Consumption	Up to 15 W
Power options	90-240 VAC ~ @ 50/60 Hz, +-43..56 VDC
Part Number Example	E6-STE
Form Factor and Dimensions	Outdoor Unit (ODU) 180x190x86 mm, 1.2 kg
	Indoor Unit IDU-CPE-G (24W) 97 x 53.5 x 35.5 mm 0.133 kg
Packing List	• Outdoor unit E6-STE- 1 pcs • Power Supply IDU-CPE-G(24W) - 1 pcs • Power Cord - 1 pcs • Cable Gland for RJ-45 - 1 pcs • Standard RJ-45 connector - 1 pcs • Shielded RJ-45 connector - 1 pcs • RJ-45 Plug Cap - 1 pcs • MONT-KIT-85 Mounting kit - 1 pcs. • Quick Start Guide - 1 pcs

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sales@astrawireless.net

RADIO FEATURES

Radio technology
MIMO 2x2, OFDM 64/128

Modulation types
From BPSK 1/2 to QAM256 5/6

Voice/RTP Aware Superpacketing

Channel Time Adjustment
Spectrum Analyzer mode
Channel testing tools

Air frame Configurable
from 1 to 10 ms

Uplink / Downlink ratio Configurable
from 50:50 to 92:8, in any direction

DFS / Radar detection / Instant DFS

Automatic Bitrate Control
Automatic Transmit Power Control
Automatic Distance Learning

Wide range of network settings ■ Built-in spectrum analyzer and antenna alignment tools ■ Easy operation due to automatic control options

NETWORKING FEATURES

Adaptive TDMA air protocol
Dynamic and fixed air frame duration
Subscriber activity aware scheduling
Permanent channel testing

Pseudo-radio interface

Full-fledged 2nd layer switch
RIPv2 / OSPFv2 /static routing
MAC/IP filtering
L2/L3 Firewall

Quality of Service
IEEE 802.1p, IP TOS/DiffServ support
Full voice support
Traffic limiting (absolute, relative, mixed)

Proprietary MINT network protocol

Ethernet-over-IP and IP-over-IP tunnels
ARP protocol support
NAT (multipool, H.323-aware)
DHCP client/server/relay

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MANAGEMENT AND SECURITY

Various Management Protocols

HTTP, HTTPS, SSH, Telnet, SNMP v1/2c/3 (MIB-II and proprietary MIBs)

- Antenna alignment tool
- Automatic software update
- Online monitoring with EMS NEXT
- WEB GUI

Safety & Security

- Storm/flood protection
- Password protection
- Secure CLI access via SSH protocol

LED Indication

- Power status
- Wireless and wired link status
- Signal level

STANDARD COMPLIANCE

Radio

- ETSI EN 301 893 v.2.1.1
- ETSI EN 302 502 v.2.1.1
- FCC part 15.407

EMC

- ETSI EN 301 489-1 v.2.1.1
- ETSI EN 301 489-17 v.3.1.1
- FCC Part 15 Class B

Safety

- EN 62368-1:2014+A11:2017
- UL 62368-1:2014
- EN 62311:2008

RoHS3

EN IEC 63000:2018

Lightning protection

IEC 61000-4-2:
+/-4kV (contact discharge),
+/-8kV (air discharge)

IEC 61000-4-4:
+/-0.5kV

IEC 61000-4-5:
+/-1kV (line-to-ground),
+/-0.5kV (line-to-line)

OPERATION OPTIONS

Power options

- 90–240 VAC @ 50/60 Hz
- ±43..56 VDC
- 802.3at or Proprietary PoE

Outdoor Unit environmental conditions

- -40..+60°C, can be extended to -55..+60°C (models with “t” index in PN)
- 100% humidity, condensing
- Dust and water protection IP66, IP67
- Wind load 160 km/h, operational; 200 km/h, survival

Indoor Unit environmental conditions

- 0..+40°C
- 95% humidity, non-condensing

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