Astra Evolution E6-ST28 PRODUCT DATASHEET



| Description | Evolution E6-ST28, 5+6 GHz subscriber terminal, with integrated antenna 28 dBi | |
|-------------------------------------|--|-----|
| Antenna | Integrated dual-pol antenna, 28 dBi, 5x5° | |
| Recommended distance | Up to 25 km | |
| Frequency range | 4900-6425 MHz | |
| Channel width | 20, 40, 80 MHz | R A |
| Net throughput | Up to 670 Mbps in 80 MHz Up to 370 Mbps in 40 MHz Up to 160 Mbps in 20 MHz | |
| Transmit power | from -5 to 25 dBm*, step 0.5 d | Bm |
| Receiver sensitivity | down to -91 dBm | |
| Center frequency adjustment step | 1 MHz | |
| Duplex scheme | TDD | |

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| Wired Interfaces | 1x GigabitEthernet | |
|-------------------------------|--|--|
| Consumption | Up to 15 W | |
| Power options | 90-240 VAC ~ @ 50/60 Hz, +-4356 VDC | |
| Part Number Example | E6-ST28 | |
| Form Factor and Dimensions | <mark>Outdoor Unit (ODU)</mark> 600x600x68 mm, 5.8 kg | |
| | Indoor Unit IDU-CPE-G (24W) 97 x 53.5 x 35.5 mm 0.133 kg | |
| Packing List | Outdoor unit E6-ST28-1pcs Power Supply IDU-CPE-G(24W) - 1pcs Power Cord - 1pcs Cable Gland for RJ-45 - 1pcs Standard RJ-45 connector - 1pcs Shielded RJ-45 connector - 1pcs RJ-45 Plug Cap - 1pcs MONT-KIT-85 Mounting kit - 1pcs Quick Start Guide - 1pcs | |



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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



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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

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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