

Astra Evolution E5-BSQ

PRODUCT DATASHEET



Description

Evolution E5-BSQ, 5 GHz base station sector with beamforming antenna

Antenna

Integrated dual-pol beamforming antenna 21 dBi 90x8° (20° AZ-steerable beam)

Recommended distance

Up to 30 km

Frequency range

4900-6050 MHz

Channel width

20, 40, 80 MHz

Net throughput

Up to 800 Mbps in 80 MHz
Up to 380 Mbps in 40 MHz
Up to 220 Mbps in 20 MHz

Transmit power

from 10 to 25 dBm*, step 0.5 dBm

Receiver sensitivity

down to -93 dBm

Center frequency adjustment step

1 MHz

Multiple access

TDMA



*May be limited by regional EIRP restrictions

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Wired Interfaces 1x GigabitEthernet, SFP, SYNC

Consumption Up to 35 W

Power options 90-240 VAC ~ @ 50/60 Hz, +-43.56 VDC

Part Number Example E5-BSQ

Form Factor and Dimensions **Outdoor Unit (ODU)**
371 x 371 x 90 mm, 4.4 kg

Indoor Unit IDU-CPE-G (24W)
137.5 x 62.5 x 33 mm 0.24 kg

Packing List

- Outdoor unit E5-BSQ- 1 pcs
- Power Supply IDU-CPE-G(56W) - 1 pcs
- Power Cord - 1 pcs
- Cable Gland for RJ-45 - 2 pcs
- Cable Gland for SFP - 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

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**
- **Automatic Bitrate Control**
Automatic 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



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 Wired link status
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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 61000-4-3: +/-0.5kV IEC 61000-4-4: +/-1kV (line-to-ground), +/-0.5kV (line-to-line)
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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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