# Astra Evolution E5-BSI PRODUCT DATASHEET



Description	Evolution E5-BSI, 5 GHz base station sector with net throughput up to 800 Mbps	UP O
Antenna	Integrated dual-pol antenna, 16 dBi, 90x8°	
Recommended distance	Up to 20 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 -5 to 27 dBm*, step 0.5 dBm	
Receiver sensitivity	down to -93 dBm	
Center frequency adjustment step	1 MHz	
Multiple access	TDMA	

<sup>\*</sup>May be limited by regional EIRP restrictions

## Astra Evolution E5-BSI PRODUCT DATASHEET

Wired Interfaces	1x GigabitEthernet, SFP, SYNC

Consumption Up to 20 W

Power options 90-240 VAC ~ @ 50/60 Hz, +-43..56 VDC

Part Number Example E5-BSI

Form Factor and Dimensions

Outdoor Unit (ODU) 371 x 371 x 90 mm, 4.4 kg

Indoor Unit IDU-CPE-G (24W) 97 x 53.5 x 35.5 mm 0.133 kg

#### Packing List

- Outdoor unit E5-BSI 1 pcs
- Power Supply IDU-CPE-G(24W) 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-HIT-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 / 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

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

## 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

