# Astra Evolution E5-BSIL PRODUCT DATASHEET



Description	Evolution E5-BSIL, 5 GHz base station sector, with 5 subscriber limitation	
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 700 Mbps in 80 MHz Up to 330 Mbps in 40 MHz Up to 150 Mbps in 20 MHz	
Transmit power	from -5 to 27 dBm*, step 0.5 d	Bm
Receiver sensitivity	down to -93 dBm	
Center frequency adjustment step	1 MHz	
Duplex scheme	TDD	

# Astra Evolution E5-BSIL PRODUCT DATASHEET

Wired Interfaces	1x GigabitEthernet	
Consumption	Up to 15 W	
Power options	90-240 VAC ∼ @ 50/60 Hz, +-4356 VDC	
Part Number Example	E5-BSIL	
Form Factor and Dimensions	Outdoor Unit (ODU) 371 x 371 x 71.5 mm, 2.8 kg	
	Indoor Unit IDU-CPE-G (24W) 97 x 53.5 x 35.5 mm 0.133 kg	
Packing List	<ul> <li>Outdoor unit E5-BSIL - 1 pcs</li> <li>Power Supply IDU-CPE-G(24W) - 1 pcs</li> <li>Power Cord - 1 pcs</li> <li>Cable Gland for RJ-45 - 1 pcs</li> <li>Standard RJ-45 connector - 1 pcs</li> <li>Shielded RJ-45 connector - 1 pcs</li> <li>RJ-45 Plug Cap - 1 pcs</li> <li>MONT-KIT-85 Mounting kit - 1 pcs</li> <li>Quick Start Guide - 1 pcs</li> </ul>	



Astra Wireless Technology. All rights reserved. www.astrawireless.net 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



Astra Wireless Technology. All rights reserved. www.astrawireless.net sales@astrawireless.net

### 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 alianment tool

Automatic software update

Online monitoring with EMS NEXT

WEB GUI

#### Safety & Security

Storm/flood protection

Password protection

Secure CLI access via SSH protocol

### I FD 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

110-240 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



Astra Wireless Technology. All rights reserved. www.astrawireless.net sales@astrawireless.net