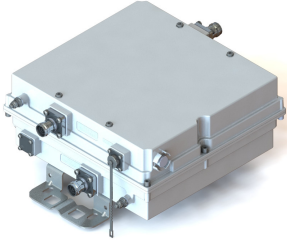


E14R50P03



Dual Band Tower Mounted Amplifier, 700//900 MHz, 12 dB, 2 BTS & 2 ANT ports, AISG with 1 RET connector (2 device with 2 sub-units), with 4.3-10 connectors

- Industry leading PIM performance
- New 4.3-10 connectors for improved PIM performance and size reduction
- 2 input ports and 2 output ports
- Designed to boost UP-Link Coverage and KPIs
- Automatic LNA by-pass function
- Connectors “in line”
- TMA is operating in AISG mode
- Single AISG with 1 RET connector
- 2 devices with 2 sub-units
- Built in lightning protection

Product Classification

Product Type 1-BTS:1-ANT (Uniplex) | Tower mounted amplifier

General Specifications

Color Gray

Modularity 2-Twin

Mounting Pipe Hardware Band clamps (2)

RF Connector Interface 4.3-10 Female

Dimensions

Height 274 mm | 10.787 in

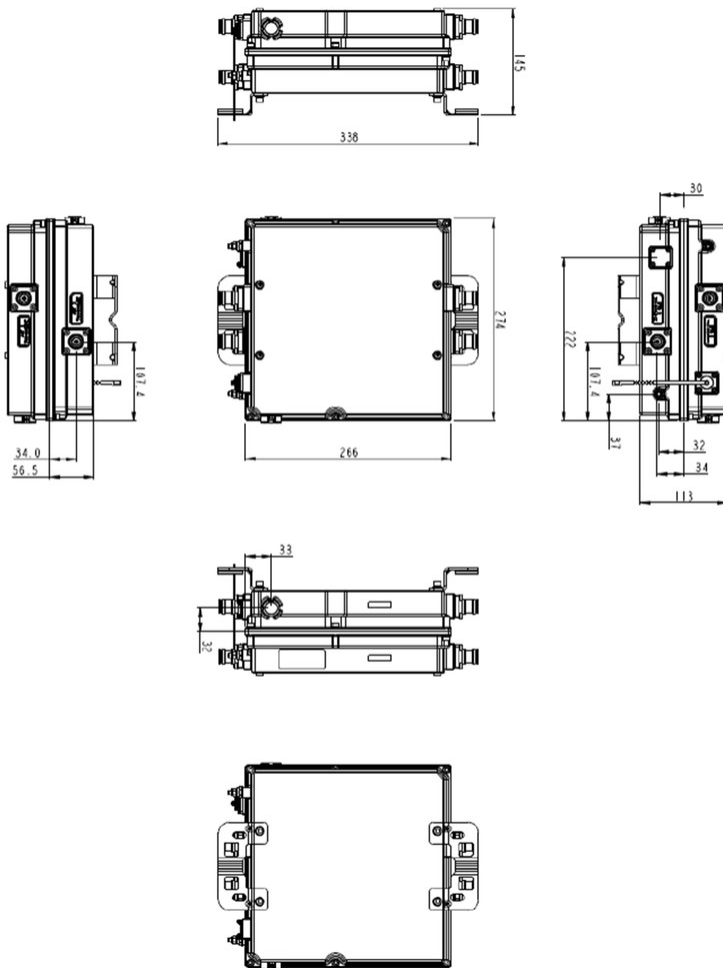
Width 266 mm | 10.472 in

Depth 113 mm | 4.449 in

Mounting Pipe Diameter Range 42.6–122 mm

E14R50P03

Outline Drawing



Electrical Specifications

License Band, Band Pass	APT 700
License Band, LNA	APT 700 CEL 900 EDD 800

Electrical Specifications, dc Power/Alarm

dc Switching/Redundancy	Yes
Lightning Surge Current	10 kA
Lightning Surge Current Waveform	8/20 waveform
Alarm Current, CWA Mode	190 mA \pm 10 mA

Electrical Specifications, AISG

E14R50P03

AISG Connector	8-pin DIN Female
AISG Connector Standard	IEC 60130-9
Protocol	AISG 2.0
Voltage, AISG Mode	10–30 Vdc

Electrical Specifications

Sub-module	1 2	1 2
Branch	1	2
Port Designation	ANT 700	ANT 900
License Band	APT 700, Band Pass APT 700, LNA	CEL 900, LNA
Return Loss, typical, dB	20	20
Return Loss - Bypass Mode, typical, dB	18	18

Electrical Specifications Rx (Uplink)

	703–733	880–915
Frequency Range, MHz		
Bandwidth, MHz	30	35
Gain, nominal, dB	12	12
Noise Figure, typical, dB	1.25	1.35
Group Delay Variation, maximum, ns	90	100
Group Delay Variation Bandwidth, MHz	5	5
Total Group Delay, maximum, ns	200	225
Total Group Delay, typical, ns	150	200
Return Loss, minimum, dB	18	18
Insertion Loss - Bypass Mode, typical, dB	1.5	1.2

Electrical Specifications Tx (Downlink)

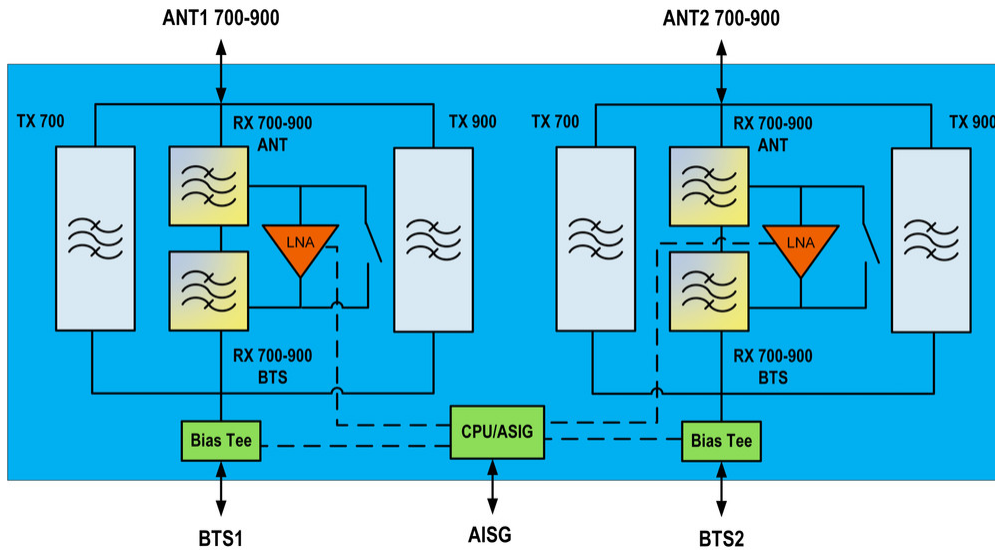
	758–788	925–960
Frequency Range, MHz		
Bandwidth, MHz	30	35
Insertion Loss, maximum, dB	0.6	0.75
Insertion Loss, typical, dB	0.4	0.6
Group Delay Variation, maximum, ns	35	35
Group Delay Variation Bandwidth, MHz	5	5
Total Group Delay, maximum, ns	80	85
Total Group Delay, typical, ns	70	60
Return Loss, minimum, dB	18	18

E14R50P03

Return Loss, typical, dB	20	20
Input Power, RMS, maximum, W	200	200
Input Power, PEP, maximum, W	2500	2500
3rd Order PIM, typical, dBc	-162	-162
3rd Order PIM Test Method	Two +43 dBm carriers	Two +43 dBm carriers

E14R50P03

Block Diagram



Environmental Specifications

Operating Temperature	-40 °C to +65 °C (-40 °F to +149 °F)
Relative Humidity	Up to 100%
Corrosion Test Method	IEC 60068-2-11, 30 days
Ingress Protection Test Method	IEC 60529:2001, IP67

Packaging and Weights

Included	Mounting hardware
Volume	8.3 L
Weight, net	9 kg 19.842 lb

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system



* Footnotes

License Band, Band Pass License Bands that are to be passed through with no amplification

E14R50P03

License Band, LNA

License Bands that have RxUplink amplification