

Tower Mounted Amplifier, Twin Upper C 700 MHz with AISG and Variable Gain

#### **OBSOLETE**

#### **Product Classification**

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

General Specifications

Color Gray
Modularity 2-Twin

Mounting Pole | Wall

Mounting Pipe HardwareBand clamps (4)RF Connector Interface7-16 DIN Female

Dimensions

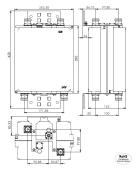
 Height
 290 mm | 11.417 in

 Width
 252.5 mm | 9.941 in

 Depth
 162 mm | 6.378 in

Outline Drawing





### **Electrical Specifications**

License Band, LNA USA 750

### Electrical Specifications, dc Power/Alarm

dc Switching/Redundancy Yes

**Lightning Surge Current** 10 kA

Lightning Surge Current Waveform 8/20 waveform

Operating Current at Voltage 140 mA @ 12 V

Operating Current Tolerance $\pm 15 \text{ mA}$ Voltage10-30 VdcVoltage, CWA Mode10-18 Vdc

Alarm Current, CWA Mode 180–200 mA @ 10–18 V

### Electrical Specifications, AISG

**AISG Carrier** 2.176 MHz ± 100 ppm

AISG Connector 8-pin DIN Female

AISG Connector Standard IEC 60130-9

**Default Protocol** AISG 2.0

Protocol AISG 1.1 | AISG 2.0

COMMSC PE®

Insertion Loss, typical, dB

Return Loss, minimum, dB

Total Group Delay, maximum, ns

RX Band Rejection, minimum, dB

Voltage, AISG Mode	10-30 Vdc	
Electrical Specifications		
Sub-module	1	2
Branch	1	1
Port Designation	ANT 0	ANT 1
AISG 2.0 Device Subunit	1.a	1.b
License Band	USA 750, LNA	USA 750, LNA
Return Loss, typical, dB	24	24
Return Loss at 8 dB, typical, dB	22	22
Return Loss at 4 dB, typical, dB	20	20
Return Loss - Bypass Mode, typical, dB	16	16
TX Band Rejection, minimum, dB	80	80
Electrical Specifications Rx (Uplink)		
Frequency Range, MHz	777.5-787	777.5-787
Bandwidth, MHz	9.5	9.5
Gain, nominal, dB	13	13
Gain Tolerance, dB	±1.0	±1.0
Gain Adjustment Range, dB	4-13	4-13
Gain Adjustment Range Increments, dB	1	1
Noise Figure, typical, dB	1.2	1.2
Noise Figure at 8 dB, typical, dB	1.5	1.5
Noise Figure at 4 dB, typical, dB	2.2	2.2
Total Group Delay, maximum, ns	330	330
Insertion Loss - Bypass Mode, typical, dB	2.3	2.3
Electrical Specifications Tx (Downlink)		
Frequency Range, MHz	746-756	746-756
Bandwidth, MHz	10	10
Insertion Loss, maximum, dB	0.4	0.4

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0.3570

24

40

0.35

70

24

40

Input Power, RMS, maximum, W100100Input Power, PEP, maximum, W100010005th Order PIM, maximum, dBc-150-150

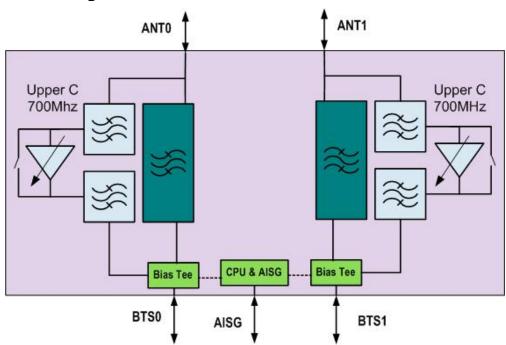
**5th Order PIM Test Method** 2 x 20 W CW tones 2 x 20 W CW tones

## Electrical Specifications, Band Reject

Frequency Range, MHz 763-775 763-775

Attenuation, minimum, dB 40 40

### Block Diagram



### Material Specifications

**Finish** Painted

Mechanical Specifications

Wind Speed, maximum 241 km/h (150 mph)

### **Environmental Specifications**

**Operating Temperature**  $-40 \,^{\circ}\text{C} \text{ to } +65 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +149 \,^{\circ}\text{F})$ 

Corrosion Test Method IEC 60068-2-11, 30 days
Ingress Protection Test Method IEC 60529:2001, IP67

Packaging and Weights

IncludedMounting hardwareWeight, net12.5 kg | 27.558 lb

\* Footnotes

**License Band, LNA** License Bands that have RxUplink amplification

