

Product Specifications



E15S09P75

Tower Mounted Amplifier, Dual DCS 1800 with AISG 2.0



CHARACTERISTICS

Electrical Specifications Rx (Uplink)

Bandwidth	75.00 MHz
License Band	DCS
Frequency Band	1710 – 1785 MHz
Gain	12 dB
Gain Tolerance	±1
Noise Figure, Mid Band, typical	1.40 dB @ 12 dB
Noise Figure, Full Band, typical	1.80 dB @ 12 dB
Output IP3, minimum	23 dBm @ 12 dB
Return Loss, minimum	18 dB
Insertion Loss, Bypass Mode, typical	3.00 dB
Return Loss, Bypass Mode, typical	14 dB
Tx Band Rejection	75 dB
Group Delay Variation, maximum	50 ns @ 5 MHz
Total Group Delay, maximum	150 ns

Electrical Specifications Tx (Downlink)

Bandwidth	75.00 MHz
Insertion Loss, maximum	0.70 dB
License Band	DCS
Frequency Band	1805 – 1880 MHz
Insertion Loss Ripple, maximum	0.50 dB
Return Loss, minimum	18 dB
3rd Order IMD	-110 dBm
3rd Order IMD Test Method	Two +43 dBm carriers
Input Power, RMS, maximum	200 W

www.commscope.com/andrew

©2011 CommScope, Inc. All rights reserved.

All trademarks identified by ® or ™ are registered trademarks or trademarks, respectively, of CommScope. All specifications are subject to change. See www.commscope.com/andrew for the most current information.

page 1 of 5
2/11/2011

E15S09P75

The diagram illustrates a 2x2 MIMO system architecture. It features two parallel signal paths for two antennas, ANT0 and ANT1. Each path includes an antenna port, an RX1 Filter, an LNA (Low Noise Amplifier), an RX2 Filter, and a Bias Tee. The LNA and RX2 Filter blocks are connected to a central Circuit Alarm Board and an AISG Control Board. The Bias Tee blocks are connected to the BTS0 and BTS1 ports. A RET (Return) port is also shown at the bottom center.

Connector Interface	7-16 DIN Female
Ground Screw Diameter	8.00 mm
Finish	Painted
Color	Gray
Mounting Pipe Hardware	Band clamps
Mounting Pipe Diameter	40–160 mm

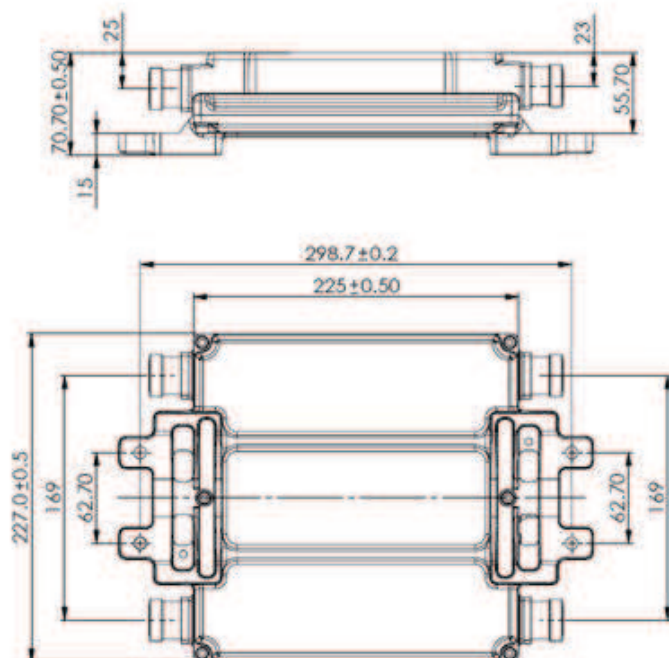
Operating Temperature	-40 °C to +65 °C (-40 °F to +149 °F)
Relative Humidity	Up to 100%
Ingress Protection Test Method	IEC 60529:2001, IP67

Product Specifications

E15S09P75



Outline Drawing



Regulatory Compliance/Certifications

Agency

ISO 9001:2008

Classification

Designed, manufactured and/or distributed under this quality management system

www.commscope.com/andrew

©2011 CommScope, Inc. All rights reserved.

All trademarks identified by ® or ™ are registered trademarks or trademarks, respectively, of CommScope. All specifications are subject to change. See www.commscope.com/andrew for the most current information.

page 5 of 5
2/11/2011

Product Specifications

E15S09P75



Dimensions

Height	225.0 mm 8.9 in
Width	227.0 mm 8.9 in
Depth	56.0 mm 2.2 in
Volume	2.8 L
Weight	4.5 kg 9.9 lb

Product Specifications



E15S09P75

Input Power, PEP, maximum	5000 W
Rx Band Rejection	45 dB
Group Delay Variation, maximum	13 ns @ 5 MHz
Total Group Delay, maximum	45 ns

Electrical Specifications

Protocol	AISG 2.0
Operating Current at Voltage	110 mA @ 12 V
Voltage	7–30 V, operational
Operating Current Tolerance	±20
Failure Current Consumption	180–210 mA @ 10–18 V
Lightning Surge Capability Waveform	8/20 waveform
Lightning Surge Current	10 kA