



TMAQ23-11A | E15R07P03
Quad Tower Mounted Amplifier WCS

Electrical Specifications

Sub-module	1 2	1 2
Branch	1	2
Port Designation	ANT 0 WCS	
License Band	WCS 2300, LNA	

Electrical Specifications Rx (Uplink)

Frequency Range	2305–2315 MHz
Gain, nominal	13.0 dB
Gain Tolerance	1
Noise Figure, typical	1.7 dB

Electrical Specifications Tx (Downlink)

Frequency Range	2350–2360 MHz
Insertion Loss, maximum	0.60 dB
Insertion Loss, typical	0.50 dB
Total Group Delay, maximum	50 ns
Return Loss, minimum	18 dB
Return Loss, typical	20 dB
Input Power, RMS, maximum	200 W
Input Power, PEP, maximum	3000 W
3rd Order PIM, typical	-110 dBm
3rd Order PIM Test Method	Two +43 dBm carriers

AISG Electrical Specifications

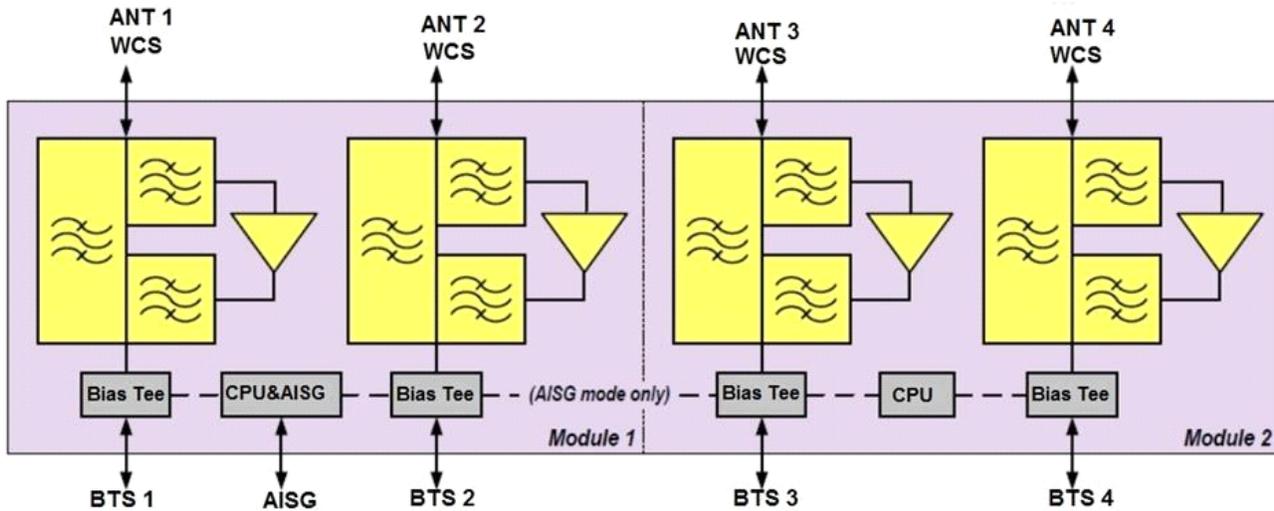
Voltage, AISG Mode	10–30 Vdc
Protocol	AISG 1.1 AISG 2.0

dc Power/Alarm Electrical Specifications

Lightning Surge Current	10 kA
Lightning Surge Current Waveform	8/20 waveform

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Block Diagram



Mechanical Specifications

RF Connector Interface 7-16 DIN Female
 RF Connector Interface Body Style Long neck

Dimensions

Height 170.0 mm | 6.7 in
 Width 270.0 mm | 10.6 in
 Depth 90.0 mm | 3.5 in
 Weight 7.8 kg | 17.2 lb

Environmental Specifications

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

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Outline Drawing

