

AWS Twin In-Band Diplexer Zero Guard Band, AWS DEF blocks + PCS / AWS C block with DC/AISG Sense and 4.3-10 Connectors

Product Classification

Product Type Diplexer

General Specifications

ApplicationIndoor | OutdoorConnector Interface4.3-10 FemaleConnector Interface StyleLong neckRx Interface4.3-10 Female

Dimensions

 Height
 245 mm | 9.646 in

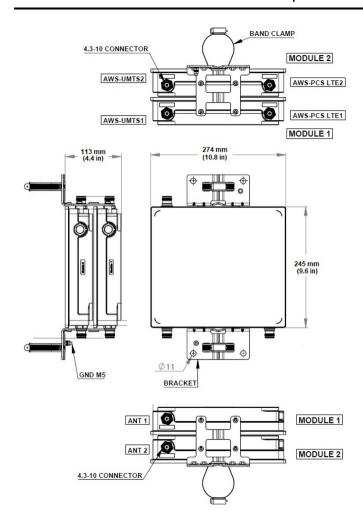
 Width
 274 mm | 10.787 in

 Depth
 113 mm | 4.449 in

 Ground Screw Diameter
 5 mm | 0.197 in

Outline Drawing





Electrical Specifications, Rx (Uplink)

Frequency Band 1736 – 1754 MHz | 1850 – 1915 MHz

Insertion Loss, typical 0.4 dB | 0.6 dB

Return Loss, minimum18 dBIsolation, minimum23 dB

Port Designation LTE AWS D,E,F + PCS band

Total Group Delay, maximum 150 ns

Electrical Specifications 2, Rx (Uplink)

Frequency Band 1730.58 – 1734.42 MHz

Isolation, minimum 23 dB

Port Designation UMTS AWS C block

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Total Group Delay, maximum160 nsInsertion Loss, typical0.8 dBReturn Loss, minimum18 dB

Electrical Specifications, Tx (Downlink)

Frequency Band 1930 – 1995 MHz | 2136 – 2154 MHz

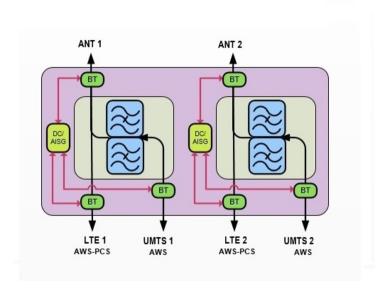
Isolation, minimum28 dBInput Power, PEP, maximum1700 WInput Power, RMS, maximum120 WTotal Group Delay, maximum120 nsInsertion Loss, typical0.6 dBReturn Loss, minimum18 dB

Electrical Specifications 2, Tx (Downlink)

Frequency Band 2130.58 – 2134.42 MHz

Input Power, PEP, maximum1700 WInsertion Loss, typical0.8 dBIsolation, minimum28 dBReturn Loss, minimum18 dBTotal Group Delay, maximum160 ns

Block Diagram



Logic Table

DC input voltage		ANT PORT
AWS-UMTS PORT	AWS-PCS LTE PORT	DC/AISG path selection
<7	<7	All ports OFF
7 ≤ V ≤ 30	<7	AWS-UMTS to ANT PORT ON
		AWS-PCS LTE to ANT OFF
<7	7 ≤ V ≤ 30	AWS-UMTS to ANT PORT ON
		AWS-PCS LTE to ANT OFF
7 ≤ V ≤ 30	7 ≤ V ≤ 30	All ports OFF

Environmental Specifications

Operating Temperature $-40 \,^{\circ}\text{C} \text{ to } +60 \,^{\circ}\text{C} \left(-40 \,^{\circ}\text{F to } +140 \,^{\circ}\text{F}\right)$

Ingress Protection Test Method IEC 60529:2001, IP67

Packaging and Weights

Included Brackets

Page 4 of 5

Weight, without mounting hardware

8.8 kg | 19.401 lb

