

# Ultra-Compact Quad Diplexer PCS-AWS/BRS, DC/AISG on PCS-AWS, NEX10 Connectors

- Quad configuration, 4x4 MIMO ready
- Ideal for small cell applications
- dc/AISG pass-through on low frequency ports
- Industry leading PIM performance
- Miniature NEX10<sup>™</sup> series connector for superior PIM and compact size

### Product Classification

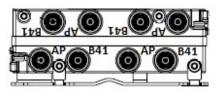
Product Type	Diplexer
General Specifications	
Color	Gray
Common Port Label	Common
Modularity	4-Quad
RF Connector Interface	NEX10 Female
RF Connector Interface Body Style	Long neck
Dimensions	
Height	65 mm   2.559 in
Width	140 mm   5.512 in
Depth	46 mm   1.811 in

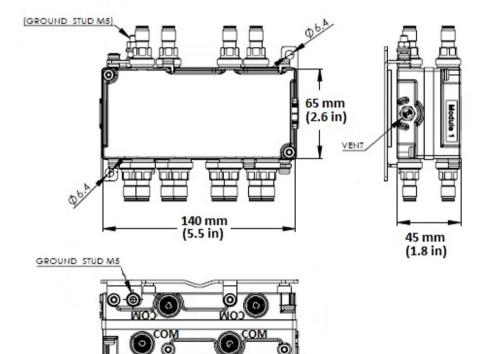
## Outline Drawing

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## **Electrical Specifications**

Impedance	50 ohm
License Band, Band Pass	AWS 17

AWS 1700 | AWS 2000 | DCS 1800 | IMT 2100 | IMT 2600 | PCS 1900 | TDD 2600

### Electrical Specifications, dc Power/Alarm

dc/AISG Pass-through Method	Factory set
dc/AISG Pass-through Path	Branch 1
dc/AISG Pass-through, combiner	Branch 1
dc/AISG Pass-through, demultiplexer	Branch 1
Lightning Surge Current	5 kA
Lightning Surge Current Waveform	8/20 waveform

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#### Voltage

10-30 Vdc

### Electrical Specifications, AISG

**AISG Carrier** 

2.176 MHz ± 100 ppm

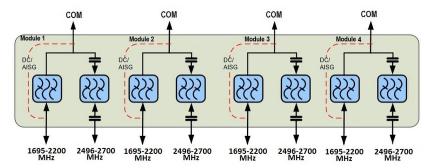
## **Electrical Specifications**

Sub-module	1   2   3   4	1   2   3   4
Branch	1	2
Port Designation	PCS-AWS	BRS (B41)
License Band	PCS 1900, Band Pass AWS 1700, Band Pass AWS 2000, Band Pass DCS 1800, Band Pass IMT 2100, Band Pass	TDD 2600, Band Pass IMT 2600, Band Pass

## Electrical Specifications, Band Pass

Frequency Range, MHz	1695-2200	2496-2700
Insertion Loss, typical, dB	0.1	0.15
Total Group Delay, maximum, ns	15	15
Return Loss, minimum, dB	20	20
Isolation, minimum, dB	35	35
Input Power, RMS, maximum, W	70	70
Input Power, PEP, maximum, W	1500	1500
3rd Order PIM, maximum, dBc	-161	-161
3rd Order PIM Test Method	Two +43 dBm carriers	Two +43 dBm carriers

## Block Diagram



### Material Specifications

Finish

Painted

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## **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
Packaging and Weights	
Included	Mounting hardware
Mounting Hardware Weight	0.13 kg   0.287 lb

Mounting Hardware Weight0.13 kg | 0.287 lbVolume0.42 LWeight, without mounting hardware1.17 kg | 2.579 lb

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