

### Ultra Compact Twin Diplexer PCS/AWS+WCS+BRS, DC on AWS/WCS /BRS, NEX10 Connectors

- Twin configuration
- Ideal for small cell applications
- BTS-to-feeder and feeder-to-antenna application
- DC/AISG pass on 1695-1780/2110-2700 MHz
- Industry leading PIM performance
- Full performance in a fraction of the size

#### Product Classification

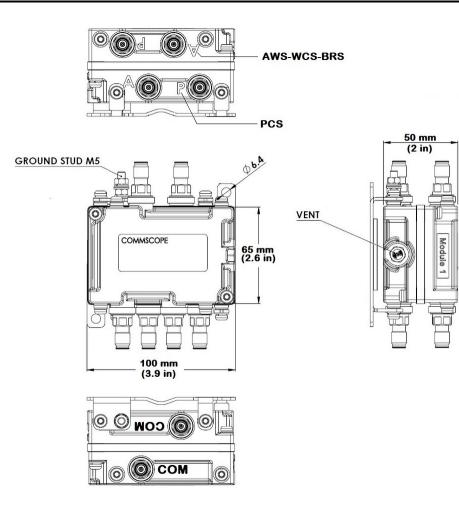
Product Type	Diplexer
General Specifications	
Color	Gray
Common Port Label	COM
Modularity	2-Twin
RF Connector Interface	NEX10 Female
RF Connector Interface Body Style	Long neck
Dimensions	
Height	65 mm   2.559 in
Width	100 mm   3.937 in
Depth	50 mm   1.969 in

### Outline Drawing

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## **Electrical Specifications**

#### Impedance

50 ohm

 License Band, Band Pass
 AWS 1700
 AWS 2000
 IMT 2600
 PCS 1900
 TDD 1900
 TDD 2300

 2300
 TDD 2600
 WCS 2300
 WCS 2300

### Electrical Specifications, dc Power/Alarm

dc/AISG Pass-through Method	Factory set
dc/AISG Pass-through Path	Branch 2
dc/AISG Pass-through, combiner	Branch 2
dc/AISG Pass-through, demultiplexer	Branch 2
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	1   2
Branch	1	2
Port Designation	PCS	AWS-WCS-BRS
License Band	PCS 1900, Band Pass	WCS 2300, Band Pass AWS 1700, Band Pass TDD 2300, Band Pass

### Electrical Specifications, Band Pass

Frequency Range, MHz	1850-1995	1695–1780 2110–2700
Insertion Loss, typical, dB	0.25	0.2
Total Group Delay, maximum, ns	13	8
Return Loss, minimum, dB	20	20
Isolation, minimum, dB	35	35
Input Power, RMS, maximum, W	100	100
Input Power, PEP, maximum, W	1500	1500
3rd Order PIM, maximum, dBc	-155	-155
3rd Order PIM Test Method	2 x 20 W CW tones	2 x 20 W CW tones

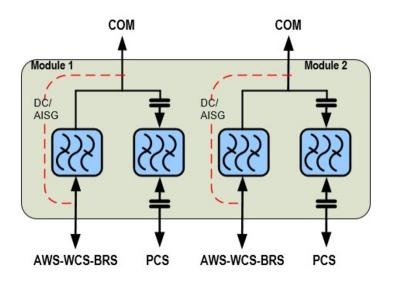
# Block Diagram

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TDD 2600, Band Pass IMT 2600, Band Pass



## Material Specifications

Finish	Painted
Mechanical Specifications	
Wind Loading @ Velocity, frontal	7.0 N @ 150 km/h (1.6 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	2.0 N @ 150 km/h (0.4 lbf @ 150 km/h)
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	0.1 kg   0.22 lb
Volume	0.325 L
Weight, without mounting hardware	0.7 kg   1.543 lb

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