

Diplexer for WCS ABCD blocks and SiriusXM repeater bands

- DC/AISG pass-through on WCS port
- New 4.3-10 connectors for improved PIM performance and size reduction

Product Classification

Product Type Diplexer

General Specifications

Color Gray

Common Port LabelCOMMONModularity1-Single

Mounting Pole | Wall

Mounting Pipe Hardware Band clamps (2)

RF Connector Interface 4.3-10 Female

RF Connector Interface Body StyleLong neck

Dimensions

 Height
 202 mm | 7.953 in

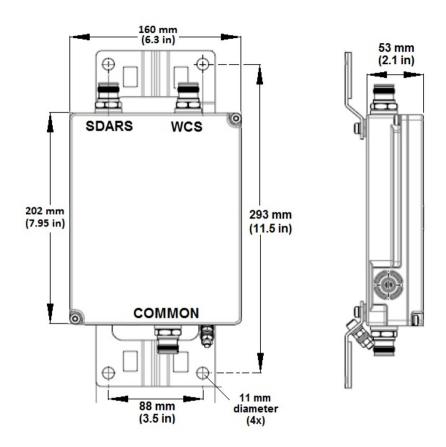
 Width
 160 mm | 6.299 in

 Depth
 53 mm | 2.087 in

 Ground Screw Diameter
 6 mm | 0.236 in

Outline Drawing





Electrical Specifications

Impedance50 ohmLicense Band, Band PassWCS 2300

Electrical Specifications, dc Power/Alarm

dc/AISG Pass-through MethodFactory setdc/AISG Pass-through PathBranch 1Lightning Surge Current10 kA

Lightning Surge Current Waveform 8/20 waveform

Electrical Specifications, AISG

AISG Carrier 2176 KHz ± 100 ppm



Insertion Loss, maximum1 dBReturn Loss, minimum15 dB

Electrical Specifications

Sub-module	1	1	1
Branch	1		2

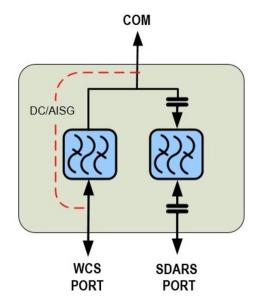
Port Designation WCS WCS SDARS 2300

License Band WCS 2300, Band Pass WCS 2300, Band Pass WCS 2300, Band Pass

Electrical Specifications, Band Pass

Frequency Range, MHz	2305.5-2317.9	2347.1-2359.5	2324-2341.5
Insertion Loss, typical, dB	0.5	0.6	1.1
Total Group Delay, maximum, ns	120	120	150
Return Loss, minimum, dB	20	20	20
Isolation, typical, dB	50	50	50
Input Power, RMS, maximum, W		50	2
Input Power, PEP, maximum, W		500	40
3rd Order PIM, maximum, dBc		-161	-161
3rd Order PIM Test Method		2 x 20 W CW tones	2 x 20 W CW tones

Block Diagram



Environmental Specifications

Operating Temperature $-40 \,^{\circ}\text{C} \text{ to } +65 \,^{\circ}\text{C} \left(-40 \,^{\circ}\text{F to } +149 \,^{\circ}\text{F}\right)$

Relative Humidity 5%-100%

Corrosion Test Method IEC 60068-2-11, 30 days
Ingress Protection Test Method IEC 60529:2001, IP67

Packaging and Weights

Included Mounting hardware

Volume 1.7 L

Weight, net 2.2 kg | 4.85 lb

