

Twin Diplexer, 1800/2100, AISG compatible, dc pass all ports, with 4.3-10 connectors

- Twin configuration
- New 4.3-10 connectors for improved PIM performance and size reduction
- dc/AISG pass-through on all frequency ports

Product Classification

Product Type	Diplexer
General Specifications	
Product Family	CBC1821
Color	Gray
Common Port Label	PORT 3 COMMON
Modularity	2-Twin
Mounting	Pole Wall
Mounting Pipe Hardware	Band clamps (2)
RF Connector Interface	4.3-10 Female
RF Connector Interface Body Style	Long neck
Dimensions	
Height	149 mm 5.866 in
Width	145 mm 5.709 in

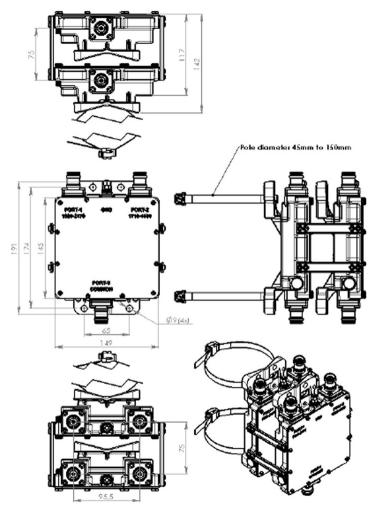
Width	145 mm 5.709 in
Depth	117 mm 4.606 in
Mounting Pipe Diameter Range	40-160 mm

Page 1 of 4

©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: January 23, 2024



Outline Drawing



Electrical Specifications

Impedance	50 ohm		
License Band, Band Pass	DCS 1800	I	IMT 2100

Electrical Specifications, dc Power/Alarm

dc/AISG Pass-through Method	Factory set
dc/AISG Pass-through Path	Branch 1 Branch 2
dc/AISG Pass-through, combiner	Branch 1 Branch 2
dc/AISG Pass-through, demultiplexer	Branch 1 Branch 2
Lightning Surge Current	3 kA

Page 2 of 4

©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: January 23, 2024



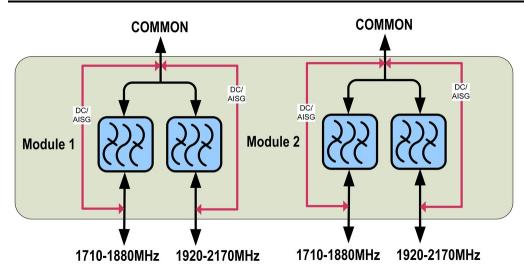
Lightning Surge Current Waveform	10/350 waveform	
Electrical Specifications, AISG		
AISG Pass-through Current, maximum	2 A	
Electrical Specifications		
Sub-module	1 2	1 2
Branch	1	2
Port Designation	PORT 2 1710-1880	PORT 1 1920-2170
License Band	DCS 1800, Band Pass	IMT 2100, Band Pass
Electrical Specifications, Band	1 Pass	
Frequency Range, MHz	1710-1880	1920-2170
Insertion Loss, typical, dB	0.25	0.35
Return Loss, minimum, dB	18	18
Return Loss, typical, dB	20	20
Isolation, minimum, dB	50	50
Input Power, RMS, maximum, W	250	250
Input Power, PEP, maximum, W	2500	2500
3rd Order PIM, typical, dBc	-158	
3rd Order PIM Test Method	Two +43 dBm carriers	
7th Order PIM, typical, dBc		-165
7th Order PIM Test Method		Two +43 dBm carriers

Block Diagram

Page 3 of 4

©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: January 23, 2024

COMMSCOPE°



Environmental Specifications

Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Corrosion Test Method	IEC 60068-2-11, 30 days
Ingress Protection Test Method	IEC 60529:2001, IP67

Packaging and Weights

Included	Mounting hardware
Volume	2.5 L
Weight, net	3.5 kg 7.716 lb

Classification

Regulatory Compliance/Certifications

Agency

ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system

Page 4 of 4

©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: January 23, 2024

