

Diplexer, DCS 1800/UMTS 2100, AISG compatible, dc pass on all ports with hybrid connectors 4.3-10 input and 7/16 output

- Industry leading PIM performance
- dc/AISG pass-through on all frequency ports
- Hybrid connectors 4.3-10 input and 7/16 output
- Isolation >60dB in 1710-1730/1805-1825 band
- Isolation >60dB in 1965-1980/2155-2170 band

Product Classification

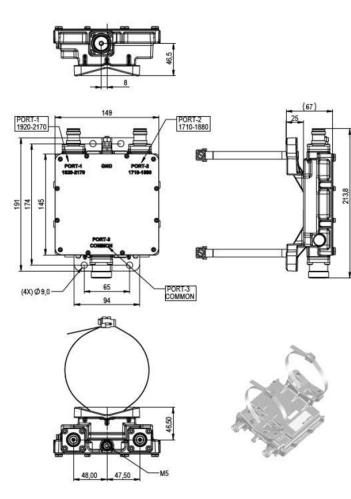
Product Type	Diplexer	
General Specifications		
Product Family	CBC1821	
Color	Gray	
Common Port Label	PORT 3 COMMON	
Modularity	1-Single	
Mounting	Pole Wall	
Mounting Pipe Hardware	Band clamps (2)	
RF Connector Interface	4.3-10 Female 7-16 DIN Female	
RF Connector Interface Body Style	Long neck	
Dimensions		
Height	149 mm 5.866 in	
Width	214 mm 8.425 in	
Depth	147 mm 5.787 in	
RF Connector Length	25 mm 0.984 in	
Ground Screw Diameter	5 mm 0.197 in	
Mounting Pipe Diameter Range	40-160 mm	

Outline Drawing

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Electrical Specifications

Insertion Loss Ripple, maximum	0.2 dB
Electrical Safety Standard	EN 60950
Electromagnetic Compatibility/Interference (EMC/EMI)	EN 55022 ETSI 301 489-1 V1.8.1
Impedance	50 ohm
License Band, Band Pass	DCS 1800 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	

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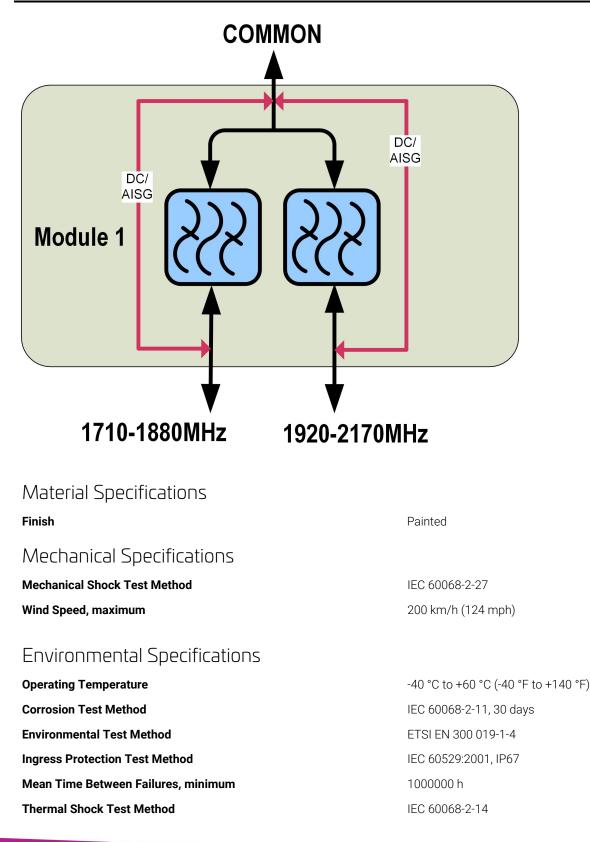
Lightning Surge Current	10 kA	
Lightning Surge Current Waveform	8/20 waveform	
Electrical Specifications, AISG		
AISG Pass-through Current, maximum	2 A	
Electrical Specifications		
Sub-module	1	1
Branch	1	2
Port Designation	PORT 1 1710-1880	PORT 2 1920-2170
License Band	DCS 1800, Band Pass	IMT 2100, Band Pass
Electrical Specifications, Band Pass		
Frequency Range, MHz	1710-1880	1920–2170
Insertion Loss, maximum, dB	0.4	0.4
	0.4 0.15	0.4 0.15
Insertion Loss, maximum, dB		
Insertion Loss, maximum, dB Insertion Loss, typical, dB	0.15	0.15
Insertion Loss, maximum, dB Insertion Loss, typical, dB Return Loss, minimum, dB	0.15 18	0.15 18
Insertion Loss, maximum, dB Insertion Loss, typical, dB Return Loss, minimum, dB Return Loss, typical, dB	0.15 18 20	0.15 18 20
Insertion Loss, maximum, dB Insertion Loss, typical, dB Return Loss, minimum, dB Return Loss, typical, dB Isolation, minimum, dB	0.15 18 20 50	0.15 18 20 50
Insertion Loss, maximum, dB Insertion Loss, typical, dB Return Loss, minimum, dB Return Loss, typical, dB Isolation, minimum, dB Isolation, typical, dB	0.15 18 20 50 54	0.15 18 20 50 54
Insertion Loss, maximum, dB Insertion Loss, typical, dB Return Loss, minimum, dB Return Loss, typical, dB Isolation, minimum, dB Isolation, typical, dB Input Power, RMS, maximum, W	0.15 18 20 50 54 250	0.15 18 20 50 54 250
Insertion Loss, maximum, dB Insertion Loss, typical, dB Return Loss, minimum, dB Return Loss, typical, dB Isolation, minimum, dB Isolation, typical, dB Input Power, RMS, maximum, W Input Power, PEP, maximum, W	0.15 18 20 50 54 250 2500	0.15 18 20 50 54 250
Insertion Loss, maximum, dB Insertion Loss, typical, dB Return Loss, minimum, dB Return Loss, typical, dB Isolation, minimum, dB Isolation, typical, dB Input Power, RMS, maximum, W Input Power, PEP, maximum, W 3rd Order PIM, typical, dBc	0.15 18 20 50 54 250 2500 -160	0.15 18 20 50 54 250
Insertion Loss, maximum, dB Insertion Loss, typical, dB Return Loss, minimum, dB Return Loss, typical, dB Isolation, minimum, dB Isolation, typical, dB Input Power, RMS, maximum, W Input Power, PEP, maximum, W 3rd Order PIM, typical, dBc 3rd Order PIM Test Method	0.15 18 20 50 54 250 2500 -160	0.15 18 20 50 54 250 2500

Block Diagram

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UV Resistance Test Method	IEC 60068-2-5
Vibration Test Method	IEC 60068-2-6
Packaging and Weights	
Included	Mounting hardware
Volume	0.9 L
Weight, net	2 kg 4.409 lb
Weight, without mounting hardware	1.9 kg 4.189 lb

Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015

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



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