

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

- Industry leading PIM performance
- Twin configuration
- 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

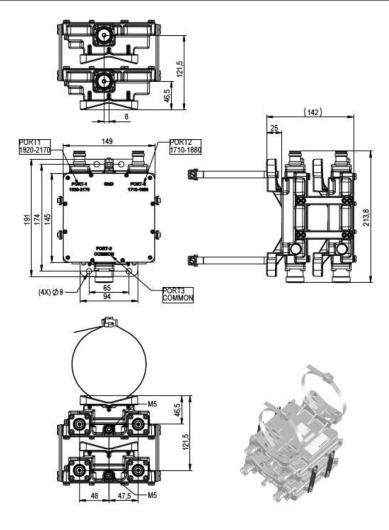
Product Classification

Product Type	Diplexer
General Specifications	
Product Family	CBC1821
Color	Gray
Common Port Label	PORT 3 COMMON
Modularity	2-Twin
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	142 mm 5.591 in
Width	214 mm 8.425 in
Depth	1490 mm 58.661 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	3 kA
Lightning Surge Current Waveform	8/20 waveform
Electrical Specifications, AISG	
AISG Pass-through Current, maximum	3 A
Electrical Specifications	

Sub-module	1 2	1 2
Branch	1	2
Port Designation	PORT 1 1710-1880	PORT 2 1920-2170
License Band	DCS 1800, Band Pass	IMT 2100, Band Pass

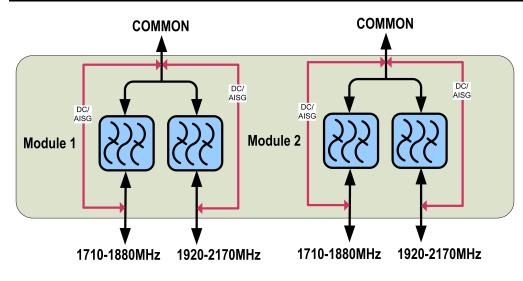
Electrical Specifications, Band Pass

Frequency Range, MHz	1710-1880	1920-2170
Insertion Loss, maximum, dB	0.4	0.4
Insertion Loss, typical, dB	0.15	0.15
Return Loss, minimum, dB	18	18
Return Loss, typical, dB	20	20
Isolation, minimum, dB	50	50
Isolation, typical, dB	54	54
Input Power, RMS, maximum, W	250	250
Input Power, PEP, maximum, W	2500	2500
3rd Order PIM, typical, dBc	-160	
3rd Order PIM Test Method	Two +43 dBm carriers	
7th Order PIM, typical, dBc		-160
7th Order PIM Test Method		Two +43 dBm carriers

Block Diagram

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Material Specifications

FinishPaintedMechanical SpecificationsIEC 60068-2-27Wind Speed, maximum200 km/h (124 mph)

Environmental Specifications

Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Corrosion Test Method	IEC 60068-2-11, 30 days
Environmental Test Method	ETSI EN 300 019-1-4
Ingress Protection Test Method	IEC 60529:2001, IP67
Mean Time Between Failures, minimum	1000000 h
Thermal Shock Test Method	IEC 60068-2-14
UV Resistance Test Method	IEC 60068-2-5
Vibration Test Method	IEC 60068-2-6
Packaging and Weights	

Included	Mounting hardware
Volume	2.6 L
Weight, net	3.9 kg 8.598 lb
Weight, without mounting hardware	3.8 kg 8.378 lb

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Regulatory Compliance/Certifications

Agency

Classification

ISO 9001:2015

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



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