

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

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

RF Connector Interface Body Style Long neck

Dimensions

 Height
 149 mm | 5.866 in

 Width
 214 mm | 8.425 in

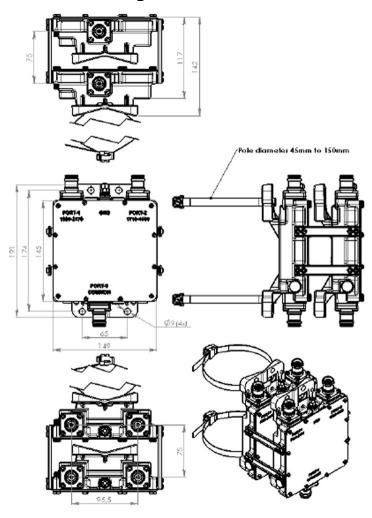
 Depth
 117 mm | 4.606 in

 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



Electrical Specifications

Insertion Loss Ripple, maximum

Electrical Safety Standard EN 60950

Electromagnetic Compatibility/Interference (EMC/EMI) EN 55022 | ETSI 301 489-1 V1.8.1

0.2 dB

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 PathBranch 1Branch 2

COMMSCOPE®

dc/AISG Pass-through, combinerBranch 1Branch 2dc/AISG Pass-through, demultiplexerBranch 1Branch 1

Lightning Surge Current 3 kA

Lightning Surge Current Waveform 8/20 waveform

Electrical Specifications, AISG

AISG Pass-through Current, maximum 2 A

Electrical Specifications

Sub-module	1 2	1 2
Branch	1	2

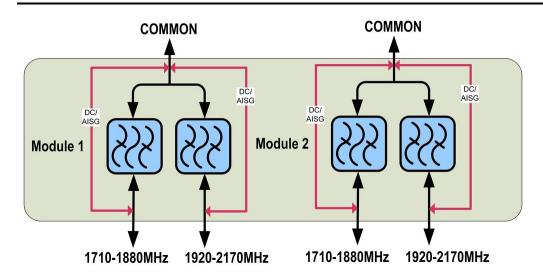
 Port Designation
 PORT 2 1710-1880
 PORT 1 1920-2170

 License Band
 DCS 1800, Band Pass
 IMT 2100, Band Pass

Electrical Specifications, Band 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



Material Specifications

Finish Painted

Mechanical Specifications

Mechanical Shock Test Method IEC 60068-2-27

Wind Speed, maximum 200 km/h | 124.274 mph

Environmental Specifications

Operating Temperature $-40 \,^{\circ}\text{C}$ to $+60 \,^{\circ}\text{C}$ ($-40 \,^{\circ}\text{F}$ to $+140 \,^{\circ}\text{F}$)

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 $3.9 \text{ kg } \mid 8.598 \text{ lb}$ Weight, without mounting hardware $3.8 \text{ kg } \mid 8.378 \text{ lb}$



Regulatory Compliance/Certifications

Agency

Classification

ISO 9001:2015

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

