

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

Pole | Wall Mounting

**Mounting Pipe Hardware** Band clamps (2)

**RF Connector Interface** 4.3-10 Female

**RF Connector Interface Body Style** Long neck

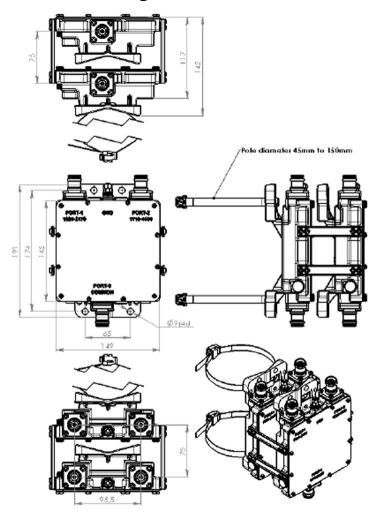
#### Dimensions

149 mm | 5.866 in Height 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 40-160 mm

**Mounting Pipe Diameter Range** 



### Outline Drawing



### **Electrical Specifications**

Insertion Loss Ripple, maximum

Electrical Safety Standard

Electromagnetic Compatibility/Interference (EMC/EMI)

Impedance

License Band, Band Pass

Electrical Specifications, dc Power/Alarm

dc/AISG Pass-through Method

dc/AISG Pass-through Path

0.2 dB

EN 60950

EN 55022 | ETSI 301 489-1 V1.8.1

50 ohm

DCS 1800 | IMT 2100

Factory set

Branch 1 | Branch 2



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dc/AISG Pass-through, combiner

Branch 1 | Branch 2

dc/AISG Pass-through, demultiplexer Branch 1 | Branch 2

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

1710-1880 1920-2170 Frequency Range, MHz 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 54 54 Isolation, typical, dB Input Power, RMS, maximum, W 250 250 Input Power, PEP, maximum, W 2500 2500 3rd Order PIM, typical, dBc -160

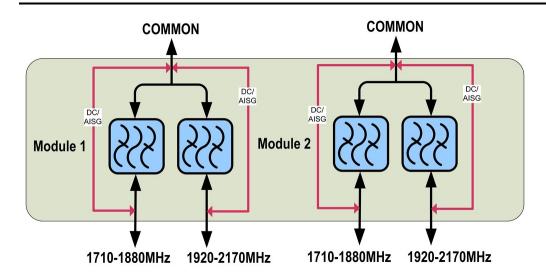
**3rd Order PIM Test Method** Two +43 dBm carriers

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 mph)

### **Environmental Specifications**

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

**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, net3.9 kg | 8.598 lbWeight, without mounting hardware3.8 kg | 8.378 lb

**COMMSCOPE®** 

### Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system