

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

#### **OBSOLETE**

This product was discontinued on: December 30, 2024

Replaced By:

E14F05P17 Twin Diplexer, DCS 1800/UMTS 2100, AISG compatible, dc pass all ports, with 4.3-10 connectors

#### Product Classification

Product Type Diplexer

General Specifications

Product Family CBC1821

**Color** Gray

Common Port Label PORT 3 COMMON

**Modularity** 2-Twin

Mounting Pipe Hardware Pole | Wall 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

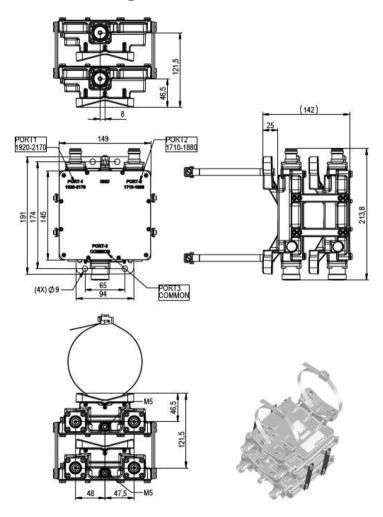


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#### **Mounting Pipe Diameter Range**

#### 40-160 mm

### Outline Drawing



## **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



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dc/AISG Pass-through PathBranch 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

**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

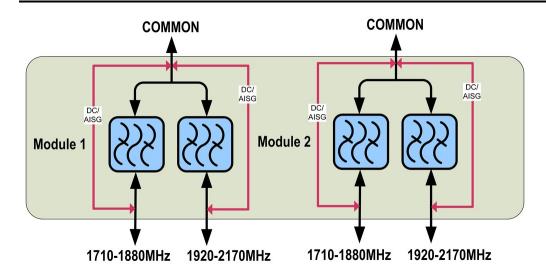
Port DesignationPORT 1 1710-1880PORT 2 1920-2170License BandDCS 1800, Band PassIMT 2100, Band Pass

### 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 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

