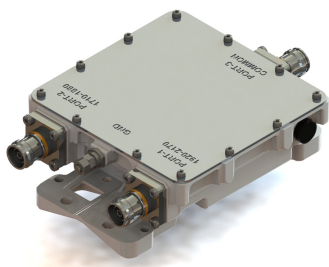


# E12F05P96-V



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

- Industry leading PIM performance
- 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

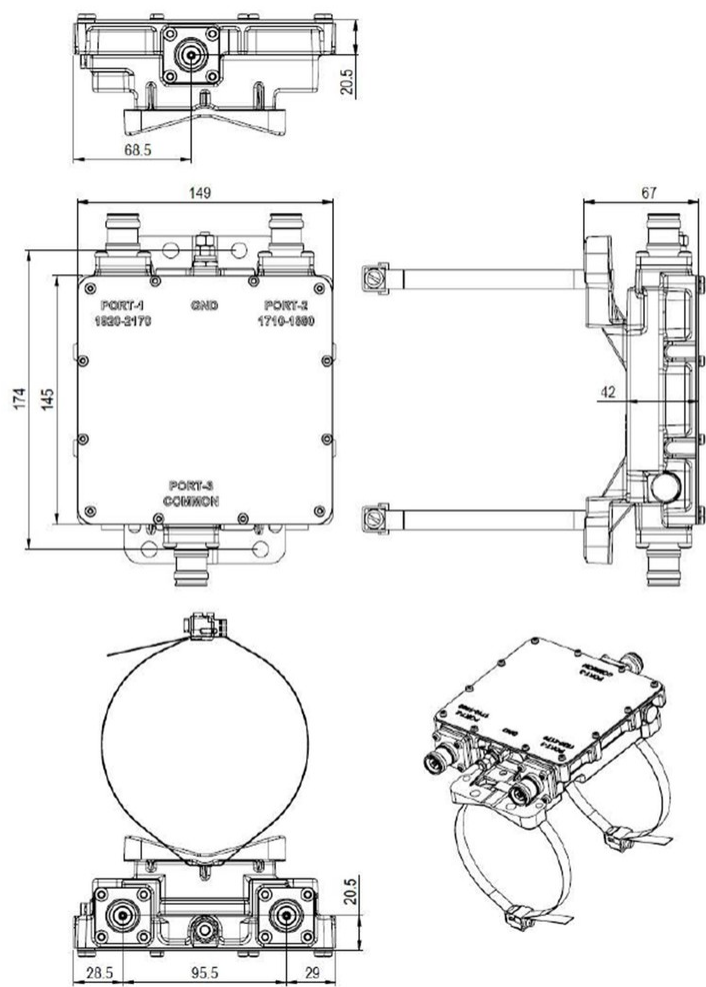
<b>Product Family</b>	CBC1821
<b>Color</b>	Gray
<b>Common Port Label</b>	PORT 3 COMMON
<b>Modularity</b>	1-Single
<b>Mounting</b>	Pole   Wall
<b>Mounting Pipe Hardware</b>	Band clamps (2)
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Interface Body Style</b>	Long neck

## Dimensions

<b>Height</b>	149 mm   5.866 in
<b>Width</b>	214 mm   8.425 in
<b>Depth</b>	42 mm   1.654 in
<b>RF Connector Length</b>	25 mm   0.984 in
<b>Ground Screw Diameter</b>	5 mm   0.197 in
<b>Mounting Pipe Diameter Range</b>	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	2 A
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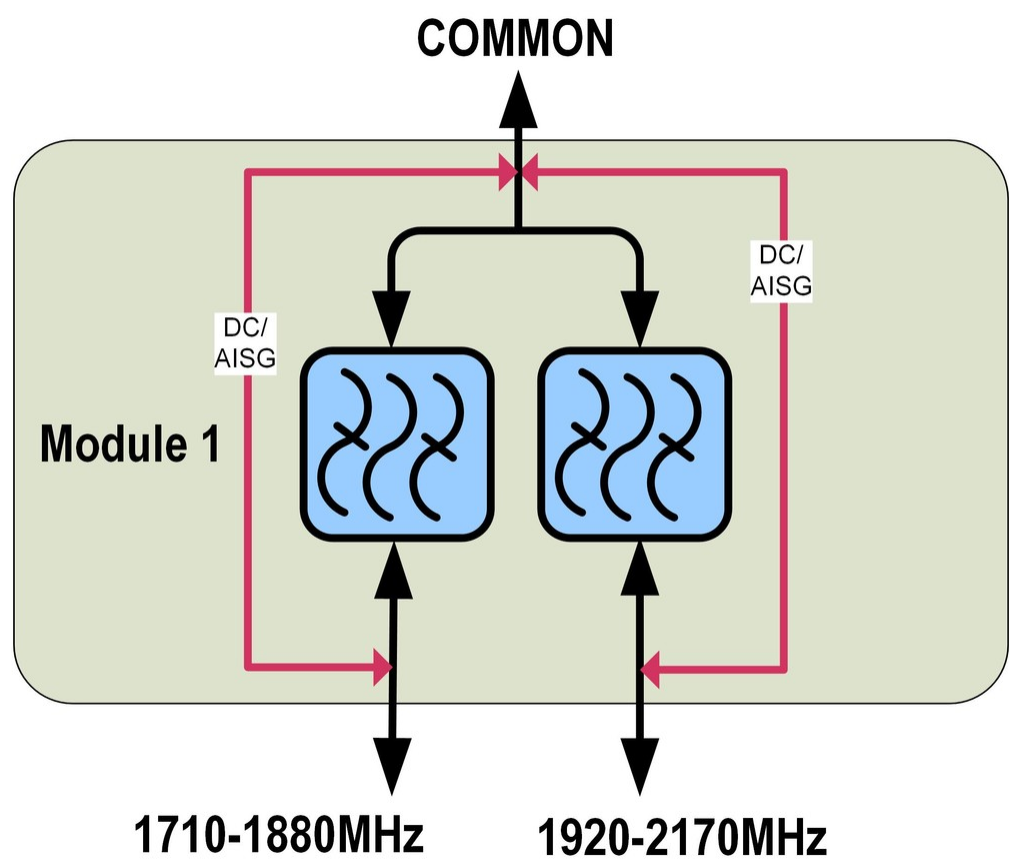
## Electrical Specifications

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
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 °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

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<b>UV Resistance Test Method</b>	IEC 60068-2-5
<b>Vibration Test Method</b>	IEC 60068-2-6

## Packaging and Weights

<b>Included</b>	Mounting hardware
<b>Volume</b>	0.9 L
<b>Weight, net</b>	2 kg   4.409 lb
<b>Weight, without mounting hardware</b>	1.9 kg   4.189 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system