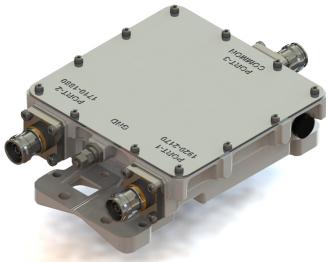


E12F05P96-V



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

OBSOLETE

This product was discontinued on: December 30, 2024

Replaced By:

E12F05P96

Diplexer, DCS 1800/UMTS 2100, AISG compatible, dc pass on 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 1-Single

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 42 mm | 1.654 in

RF Connector Length 25 mm | 0.984 in

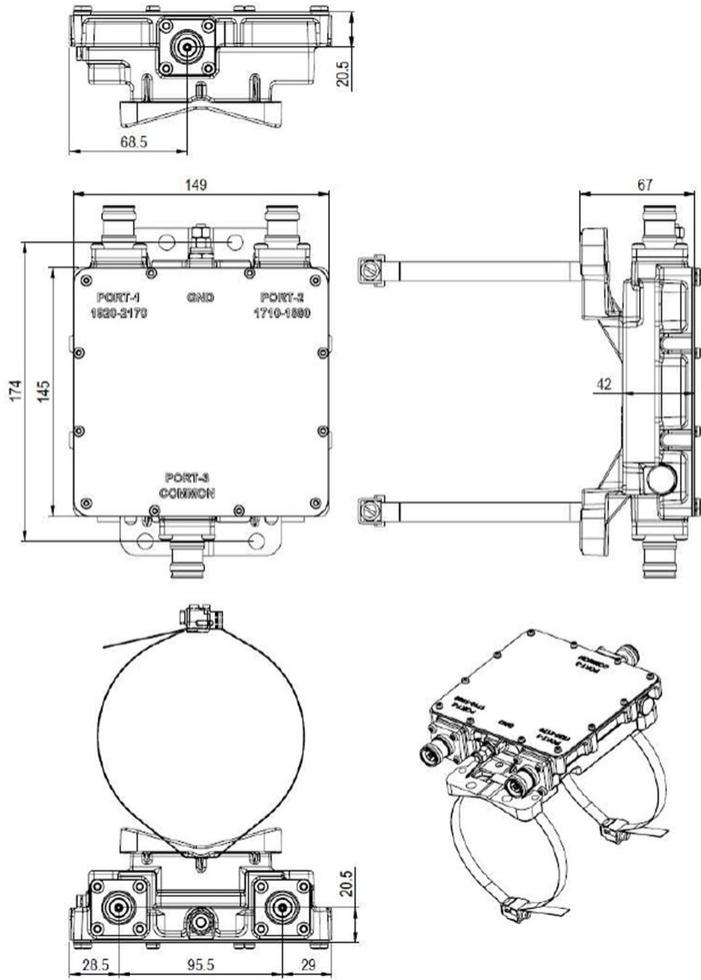
Ground Screw Diameter 5 mm | 0.197 in

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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 Path	Branch 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	2 A
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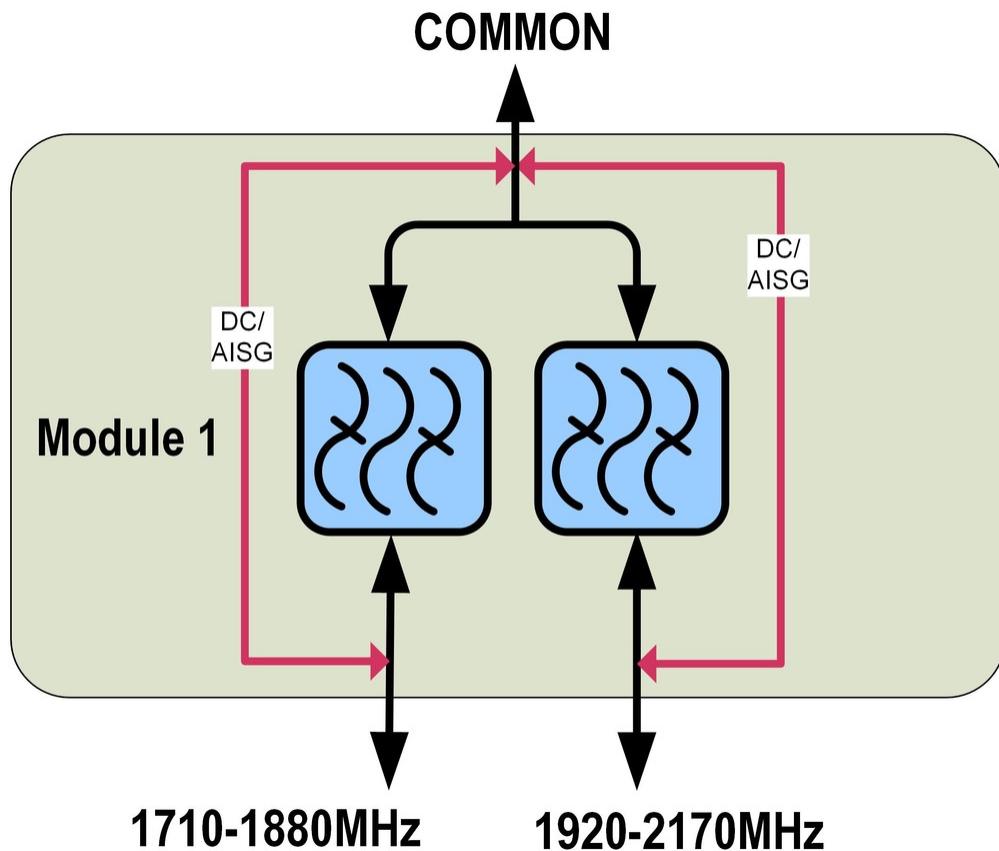
Electrical Specifications

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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UV Resistance Test Method IEC 60068-2-5

Vibration Test Method IEC 60068-2-6

Packaging and Weights

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

Regulatory Compliance/Certifications

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