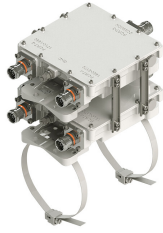


# E12F05P39



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

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

This product will be 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** 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

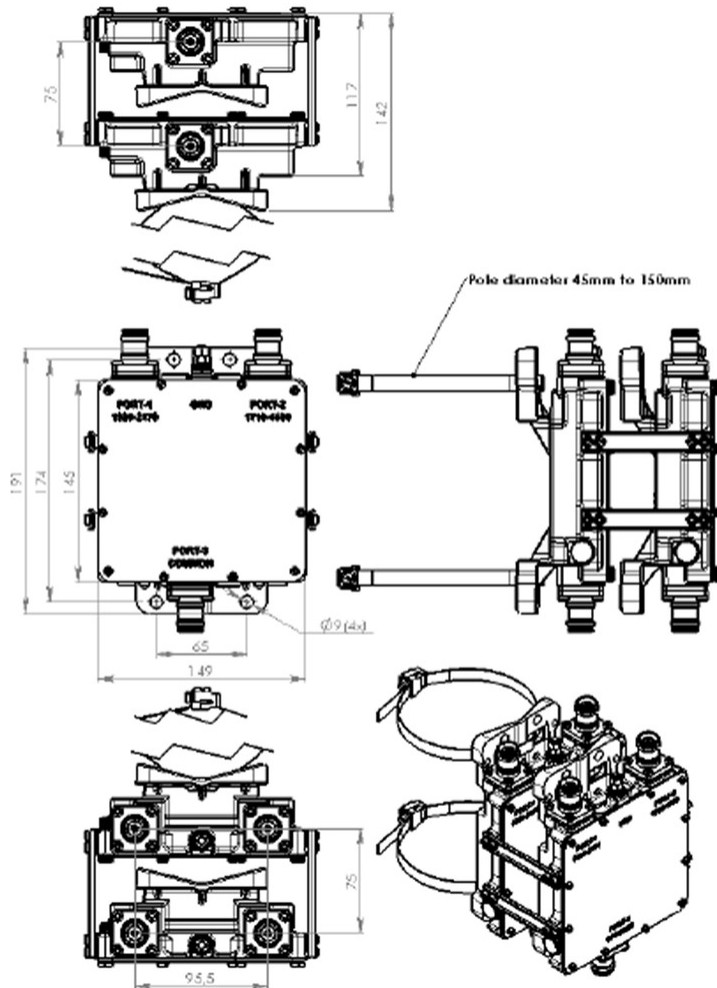
**Width** 145 mm | 5.709 in

**Depth** 117 mm | 4.606 in

**Mounting Pipe Diameter Range** 40–160 mm

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## Outline Drawing



## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>License Band, Band Pass</b>	DCS 1800   IMT 2100

## Electrical Specifications, dc Power/Alarm

<b>dc/AISG Pass-through Method</b>	Factory set
<b>dc/AISG Pass-through Path</b>	Branch 1   Branch 2
<b>dc/AISG Pass-through, combiner</b>	Branch 1   Branch 2
<b>dc/AISG Pass-through, demultiplexer</b>	Branch 1   Branch 2
<b>Lightning Surge Current</b>	3 kA

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**Lightning Surge Current Waveform** 10/350 waveform

## Electrical Specifications, AISG

**AISG Pass-through Current, maximum** 2 A

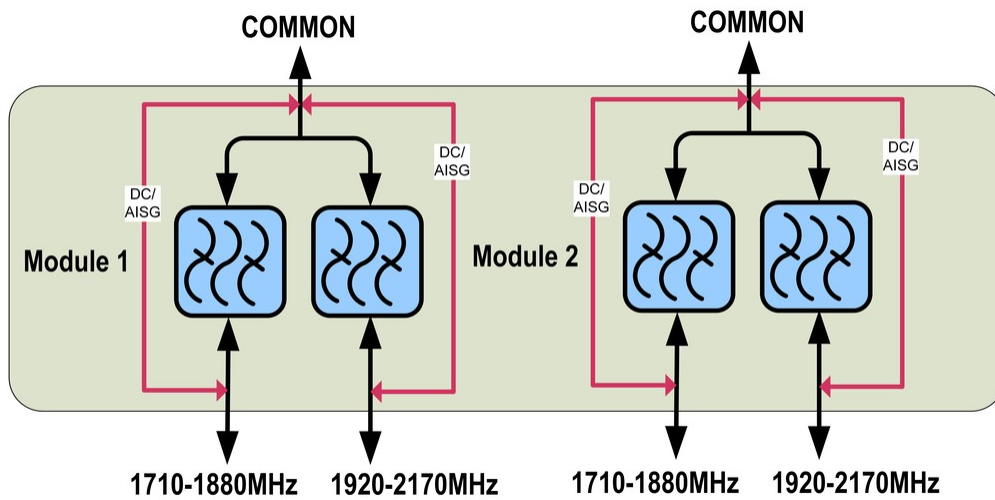
## Electrical Specifications

<b>Sub-module</b>	<b>1   2</b>	<b>1   2</b>
<b>Branch</b>	1	2
<b>Port Designation</b>	PORT 2 1710-1880	PORT 1 1920-2170
<b>License Band</b>	DCS 1800, Band Pass	IMT 2100, Band Pass

## Electrical Specifications, Band Pass

<b>Frequency Range, MHz</b>	<b>1710–1880</b>	<b>1920–2170</b>
<b>Insertion Loss, typical, dB</b>	0.25	0.35
<b>Return Loss, minimum, dB</b>	18	18
<b>Return Loss, typical, dB</b>	20	20
<b>Isolation, minimum, dB</b>	50	50
<b>Input Power, RMS, maximum, W</b>	250	250
<b>Input Power, PEP, maximum, W</b>	2500	2500
<b>3rd Order PIM, typical, dBc</b>	-158	
<b>3rd Order PIM Test Method</b>	Two +43 dBm carriers	
<b>7th Order PIM, typical, dBc</b>		-165
<b>7th Order PIM Test Method</b>		Two +43 dBm carriers

## Block Diagram



## Environmental Specifications

<b>Operating Temperature</b>	-40 °C to +60 °C (-40 °F to +140 °F)
<b>Corrosion Test Method</b>	IEC 60068-2-11, 30 days
<b>Ingress Protection Test Method</b>	IEC 60529:2001, IP67

## Packaging and Weights

<b>Included</b>	Mounting hardware
<b>Volume</b>	2.5 L
<b>Weight, net</b>	3.5 kg   7.716 lb

## Regulatory Compliance/Certifications

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