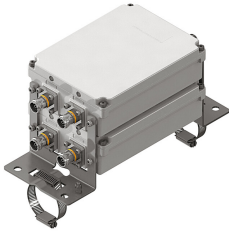


# E14F05P09



Twin Diplexer, 700-800/900 MHz, (DC Smart Bypass), 4.3-10 connectors

- Industry leading PIM performance
- Designed for network modernization application, introduction of LTE700 and LTE800 on existing site
- Twin configuration
- New 4.3-10 connectors for improved PIM performance and size reduction
- DC/AISG SMART bypass functionality

## OBSOLETE

This product was discontinued on: December 31, 2023

### Replaced By:

E14F06P45

Twin Diplexer, 694-862 MHz/880-960 MHz, DC SMART bypass all, with 4.3-10 connectors

## Product Classification

**Product Type** Diplexer

## General Specifications

**Product Family** CBC79X

**Color** Gray

**Common Port Label** COM

**Modularity** 2-Twin

**Mounting** Pole | Wall

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

**RF Connector Interface** 4.3-10 Female

**RF Connector Interface Body Style** Medium neck

## Dimensions

**Height** 210 mm | 8.268 in

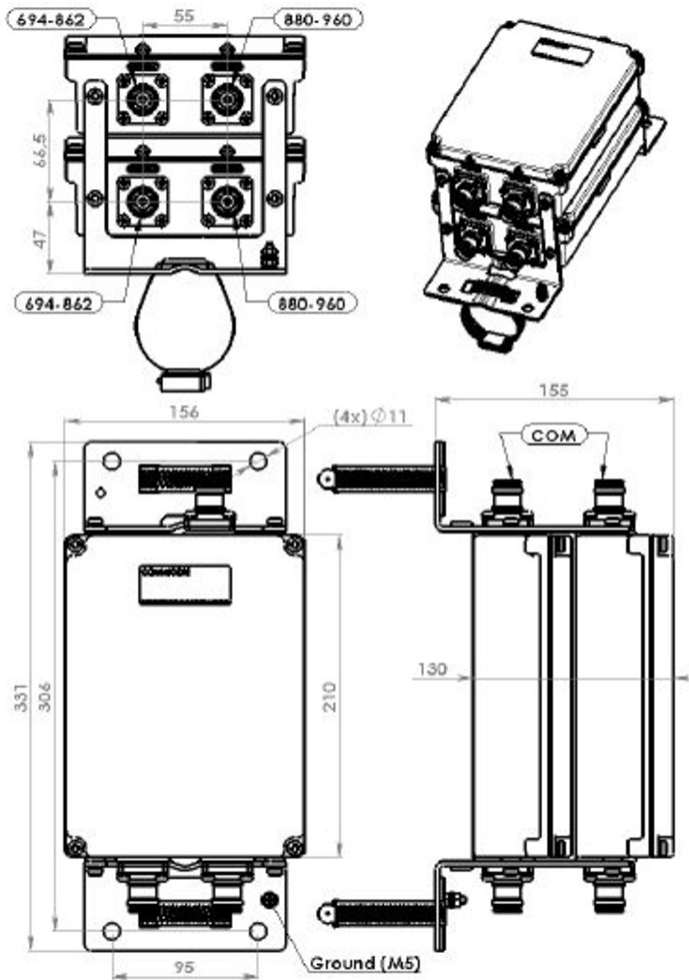
**Width** 156 mm | 6.142 in

**Depth** 130 mm | 5.118 in

**Mounting Pipe Diameter Range** 42.6-122 mm

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## Outline Drawing



## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>License Band, Band Pass</b>	APT 700   CEL 900   EDD 800   LMR 750   USA 700   USA 750

## Electrical Specifications, dc Power/Alarm

<b>dc/AISG Pass-through Method</b>	Auto sensing
<b>dc/AISG Pass-through Path</b>	See logic table
<b>dc/AISG Pass-through, combiner</b>	dc Sensing
<b>Lightning Surge Current</b>	5 kA
<b>Lightning Surge Current Waveform</b>	8/20 waveform

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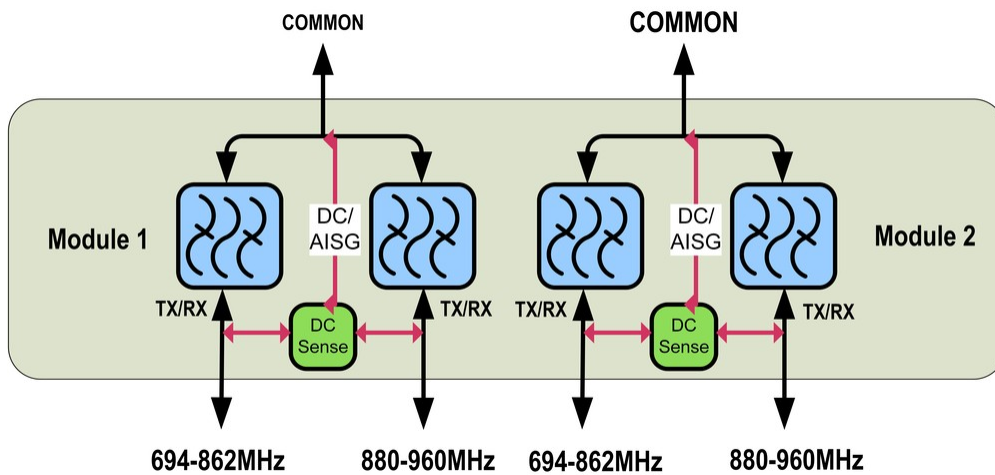
## Electrical Specifications

<b>Sub-module</b>	<b>1   2</b>	<b>1   2</b>
<b>Branch</b>	1	2
<b>Port Designation</b>	694-862	880-960
<b>License Band</b>	APT 700, Band Pass EDD 800, Band Pass LMR 750, Band Pass USA 700, Band Pass USA 750, Band Pass	CEL 900, Band Pass

## Electrical Specifications, Band Pass

<b>Frequency Range, MHz</b>	<b>694–862</b>	<b>880–960</b>
<b>Insertion Loss, typical, dB</b>	0.2	0.2
<b>Return Loss, typical, dB</b>	22	22
<b>Isolation, minimum, dB</b>	50	50
<b>Input Power, RMS, maximum, W</b>	300	300
<b>Input Power, PEP, maximum, W</b>	3000	3000
<b>3rd Order PIM, typical, dBc</b>	-160	-160
<b>3rd Order PIM Test Method</b>	Two +43 dBm carriers	Two +43 dBm carriers

## Block Diagram



## Logic Table

# E14F05P09

COMBINER Mode: One of three Ports (1-2) is selected to the COM port								
MODE	COM	PORT 1 694-862	PORT 2 880-960	COM	PORT 1 694-862	PORT 2 880-960	PORT 1 694-862	PORT 2 880-960
		Input Voltage		Selected Port			Led	
COMBINER Mode	<7V	<7V	>7V	ON	OFF	ON	off	Green
	<7V	>7V	<7V	ON	ON	OFF	Green	off
	<7V	>7V	>7V	ON	ON	OFF	Green	Red

Note: LED indication is referred to normal (no alarm state)

SPLITTER Mode: COM Port is split to Ports (1-2) with valid impedance									
MODE	COM	PORT 1 694-862	PORT 2 880-960	COM	PORT 1 694-862	PORT 2 880-960	PORT 1 694-862	PORT 2 880-960	
		DC Port Impedance Ports 1,2,3,4 Voltage <7V			Selected Port			Led	
SPLITTER Mode	>7V	short	open/load	ON	OFF	ON	OFF	Green	
	>7V	open/load	short	ON	ON	OFF	Green	OFF	
	>7V	open/load	open/load	ON	ON	ON	Green*	Green*	
	>7V	short	short	ON	OFF	OFF	OFF	OFF	

\*If the input voltage is from 7V to 19V, the green LEDs will be on one at a time, each for 2 seconds indicating DC voltage is available at the RF port corresponding to the LED Green lighted  
 Alternating LEDs is merely a mechanism to save power consumption.

## Environmental Specifications

<b>Operating Temperature</b>	-40 °C to +65 °C (-40 °F to +149 °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>	4.2 L
<b>Weight, net</b>	5.9 kg   13.007 lb
<b>Weight, without mounting hardware</b>	5.3 kg   11.684 lb

## Regulatory Compliance/Certifications

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

