

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

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

1-Single

#### **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

Mounting Pole | Wall

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

**RF Connector Interface** 4.3-10 Female

**RF Connector Interface Body Style** Medium neck

### Dimensions

Modularity

 Height
 210 mm | 8.268 in

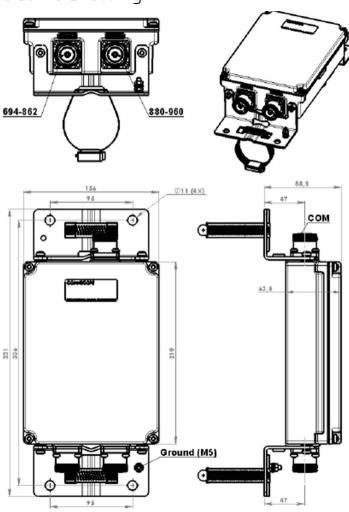
 Width
 156 mm | 6.142 in

 Depth
 635 mm | 25 in

 Mounting Pipe Diameter Range
 42.6–122 mm



## Outline Drawing



## **Electrical Specifications**

**Impedance** 50 ohm

License Band, Band Pass APT 700 | CEL 900 | EDD 800 | LMR 750 | USA 700 | USA 750

## Electrical Specifications, dc Power/Alarm

dc/AISG Pass-through MethodAuto sensingdc/AISG Pass-through PathSee logic tabledc/AISG Pass-through, combinerdc Sensing

**Lightning Surge Current** 5 kA

**Lightning Surge Current Waveform** 8/20 waveform

**COMMSCOPE®** 

**License Band** 

## **Electrical Specifications**

Sub-module 1 | 2 1 | 2 **Branch Port Designation** 694-862 880-960

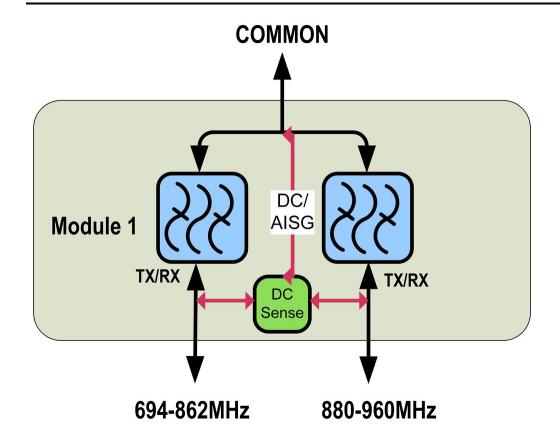
APT 700, Band Pass EDD 800, Band Pass LMR 750, Band Pass USA 700, Band Pass USA 750, Band Pass

CEL 900, Band Pass

## Electrical Specifications, Band Pass

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

## Block Diagram





### Logic Table

			COMBINER Mod	e: One of three Po	rts (1-2) is selected to	the COM port		
MODE	СОМ	PORT 1 694-862	PORT 2 880-960	СОМ	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	СОМ	PORT 1 694-862	PORT 2 880-960	СОМ	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		
	>7V	short	open/load	ON	OFF	ON	OFF	Green
SPLITTER	>7V	open/load	short	ON	ON	OFF	Green	OFF
Mode	>7V	open/load	open/load	ON	ON	ON	Green*	Green*
	>7V	short	short	ON	OFF	OFF	OFF	OFF

<sup>\*</sup>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

### **Environmental Specifications**

**Operating Temperature**  $-40 \,^{\circ}\text{C} \text{ to } +65 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +149 \,^{\circ}\text{F})$ 

Corrosion Test Method IEC 60068-2-11, 30 days

Ingress Protection Test Method IEC 60529:2001, IP67

Packaging and Weights

**Included** Mounting hardware

Volume 2.1 L

Weight, net  $3.1 \text{ kg} \mid 6.834 \text{ lb}$  Weight, without mounting hardware  $2.7 \text{ kg} \mid 5.952 \text{ lb}$ 

### Regulatory Compliance/Certifications

#### Agency Classification

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



at the RF port corresponding to the LED Green lighted

Alternating LEDs is merely a mechanism to save power consumption.