E11F02P65

Single Diplexer, 700-800//900 MHz, (DC Smart Bypass)

- Industry leading PIM performance
- Designed for network modernization application, introduction of LTE700 and LTE800 on existing site
- Single configuration
- DC/AISG SMART bypass functionality

OBSOLETE

This product was discontinued on: July 1, 2022

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	1-Single
Mounting	Pole | Wall
Mounting Pipe Hardware	Band clamps (2)
RF Connector Interface	7-16 DIN Female
RF Connector Interface Body Style	Medium neck

Dimensions

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

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Outline Drawing
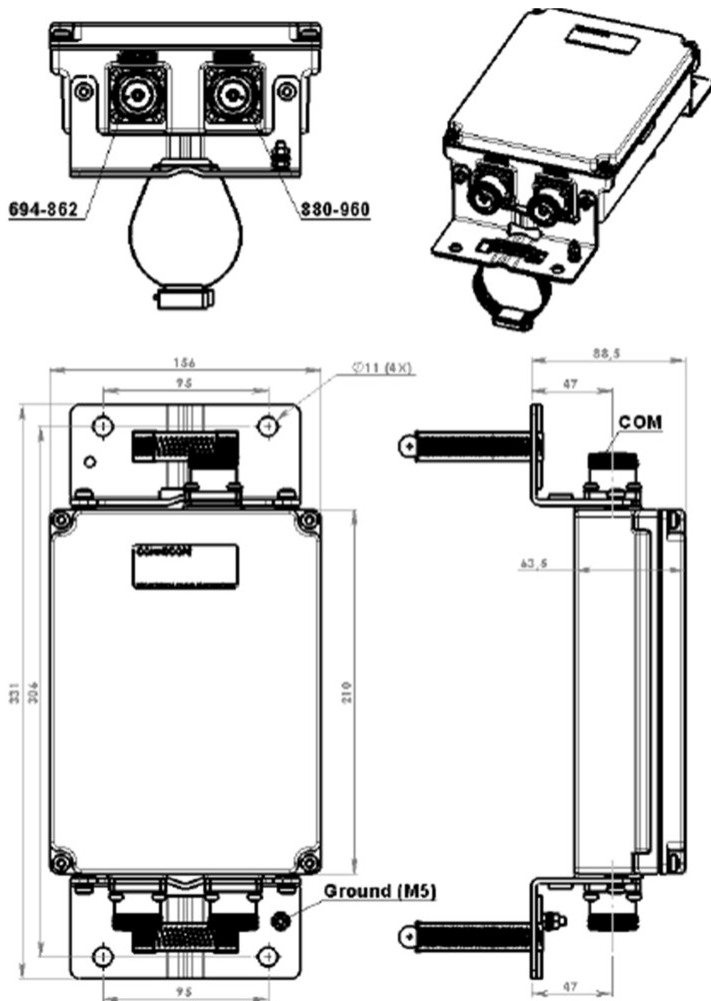
Electrical Specifications

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

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Electrical Specifications

| Sub-module	1 | 2	1 | 2
Branch	1	2
Port Designation	694-862	880-960
License Band	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, RMS, maximum, W	300	300
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
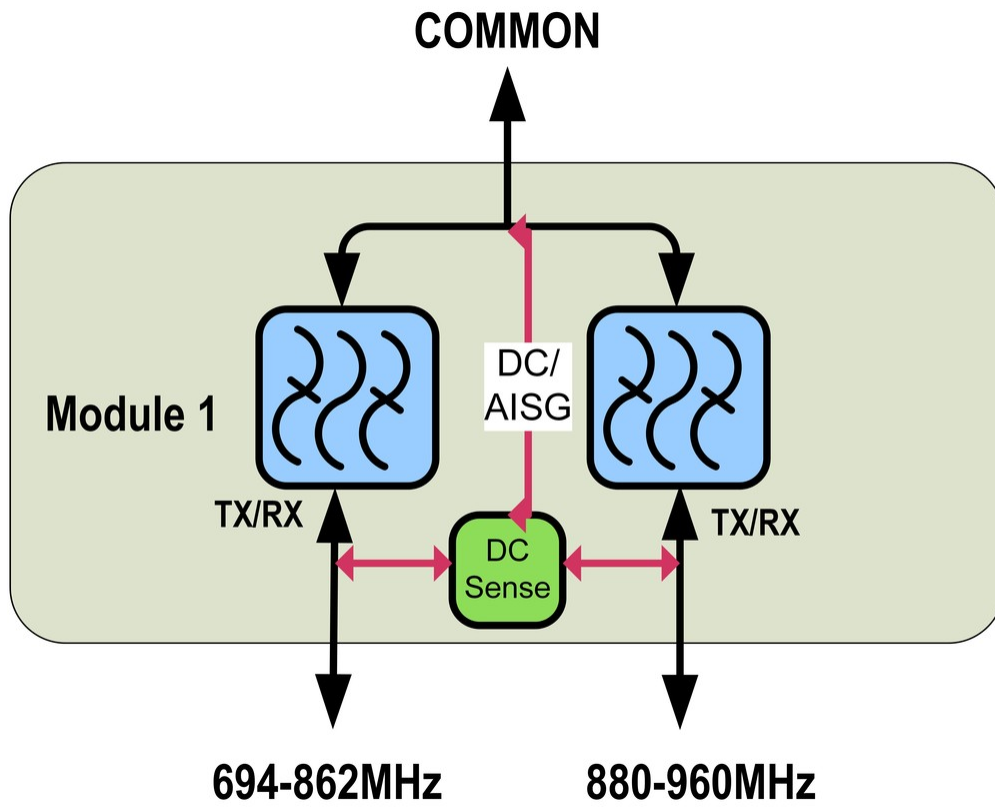
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COMMON

Module 1

DC/AISG

TX/RX

DC Sense

TX/RX

694-862MHz   **880-960MHz**

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Logic Table

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
	COMBINER Mode: One of three Ports (1-2) is selected to the COM port							

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MODE		Input Voltage			Selected Port			Led
	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
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		DC Port Impedance Ports 1,2,3,4 Voltage <7V			Selected Port			Led
	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
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

Operating Temperature	-40 °C to +65 °C (-40 °F to +149 °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 kg	6.834 lb
Weight, without mounting hardware	2.7 kg	5.952 lb

Regulatory Compliance/Certifications

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

ISO
9001:2015

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