

# Single Quadplexer 700-800//900//1800//2100-2600 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
- Suitable for feeders cables reduction
- DC/AISG SMART bypass functionality

#### **OBSOLETE**

This product was discontinued on: December 30, 2024

Replaced By:

E14F15P09 Single Quadplexer 700-800/900/1800/2100-2600 MHz, with 4.3-10 connectors, dc bypass on all ports

#### **Product Classification**

Product Type Quadplexer

#### General Specifications

Product Family CBC791826

ColorGrayCommon Port LabelCOMModularity1-Single

MountingPole | WallMounting Pipe HardwareBand clamps (2)RF Connector Interface4.3-10 FemaleRF Connector Interface Body StyleMedium neck

Dimensions

 Height
 263 mm | 10.354 in

 Width
 328 mm | 12.913 in

 Depth
 64 mm | 2.52 in

 Mounting Pipe Diameter Range
 42.6–122 mm



### **Electrical Specifications**

**Impedance** 50 ohm

**License Band, Band Pass** APT 700 | CEL 900 | DCS 1800 | EDD 800 | IMT 2100 | IMT 2600

#### 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

#### Electrical Specifications, AISG

**AISG Carrier** 2176 KHz ± 100 ppm

Insertion Loss, maximum0.5 dBReturn Loss, minimum10 dB

#### **Electrical Specifications**

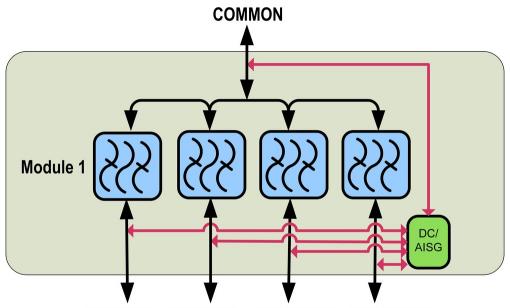
Sub-module	1   2	1   2	1   2	1   2
Branch	1	2	3	4
Port Designation	DD2-800	900	1800	21-23-26
License Band	APT 700, Band Pass FDD 800, Band Pass	CEL 900, Band Pass	DCS 1800, Band Pass	IMT 2100, Band Pass

## Electrical Specifications, Band Pass

Frequency Range, MHz	694-862	880-960	1710-1880	1920-2170 2300-2690
Insertion Loss, typical, dB	0.3	0.3	0.25	0.25
Return Loss, typical, dB	22	22	22	22
Isolation, minimum, dB	50	50	50	50
Input Power, RMS, maximum, W	300	300	300	300
Input Power, PEP, maximum, W	3000	3000	3000	3000
3rd Order PIM, typical, dBc	-160	-160	-160	-160
3rd Order PIM Test Method	Two +43 dBm carriers			

### Block Diagram





694-862MHz 880-960MHz 1710-1880MHz 1920-2170MHz 2300-2690MHz

### Logic Table

COMBINER Mode: One of four Ports (1-4) is selected to the COM port														
MODE	COM	PORT 1 694-862	PORT 2 880-960	PORT 3 1800	PORT 4 21-23-26	СОМ	PORT 1 694-862	PORT 2 880-960	PORT 3 1800	PORT 4 21-23-26	PORT 1 694-862	PORT 2 880-960	PORT 3 1800	PORT 4 21-23-26
	Input Voltage							Selected Por	t		Led			
	<7V	<7V	<7V	<7V	>7V	ON	OFF	OFF	OFF	ON	off	off	off	Green
	<7V	<7V	<7V	>7V	<7V	ON	OFF	OFF	ON	OFF	off	off	Green	off
	<7V	<7V	>7V	<7V	<7V	ON	OFF	ON	OFF	OFF	off	Green	off	off
	<7V	>7V	<7V	<7V	<7V	ON	ON	OFF	OFF	OFF	Green	off	off	off
41	<7V	<7V	<7V	>7V	>7V	ON	OFF	OFF	OFF	ON	off	off	Red	Green
COMBINER Mode	<7V	<7V	>7V	<7V	>7V	ON	OFF	OFF	OFF	ON	off	Red	off	Green
Σ	<7V	<7V	>7V	>7V	<7V	ON	OFF	ON	OFF	OFF	off	Green	Red	off
Ä	<7V	<7V	>7V	>7V	>7V	ON	OFF	OFF	OFF	ON	off	Red	Red	Green
₩ W	<7V	>7V	<7V	<7V	>7V	ON	OFF	OFF	OFF	ON	Red	off	off	Green
ő	<7V	>7V	<7V	>7V	<7V	ON	ON	OFF	OFF	OFF	Green	off	Red	off
•	<7V	>7V	<7V	>7V	>7V	ON	OFF	OFF	OFF	ON	Red	off	Red	Green
	<7V	>7V	>7V	<7V	<7V	ON	ON	OFF	OFF	OFF	Green	Red	off	off
	<7V	>7V	>7V	<7V	>7V	ON	OFF	OFF	OFF	ON	Red	Red	off	Green
	<7V	>7V	>7V	>7V	<7V	ON	ON	OFF	OFF	OFF	Green	Red	Red	off
	<7V	>7V	>7V	>7V	>7V	ON	OFF	OFF	OFF	ON	Red	Red	Red	Green

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

SPLITTER Mode: COM Port is split to Ports (1-4) with valid impedance														
MODE	СОМ	PORT 1 694-862	PORT 2 880-960	PORT 3 1800	PORT 4 21-23-26	СОМ	PORT 1 694-862	PORT 2 880-960	PORT 3 1800	PORT 4 21-23-26	PORT 1 694-862	PORT 2 880-960	PORT 3 1800	PORT 4 21-23-26
	DC Port Impedance Ports 1,2,3,4 Voltage <7V							Selected Por	t		Led			
	>7V	short	short	short	open/load	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	Green
	>7V	short	short	open/load	short	ON	OFF	OFF	ON	OFF	OFF	OFF	Green	OFF
	>7V	short	short	open/load	open/load	ON	OFF	OFF	ON	ON	OFF	OFF	Green*	Green*
	>7V	short	open/load	short	short	ON	OFF	ON	OFF	OFF	OFF	Green	OFF	OFF
	>7V	short	open/load	short	open/load	ON	OFF	ON	OFF	ON	OFF	Green*	OFF	Green*
<u>o</u>	>7V	short	open/load	open/load	short	ON	OFF	ON	ON	OFF	OFF	Green*	Green*	OFF
<u>p</u>	>7V	short	open/load	open/load	open/load	ON	OFF	ON	ON	ON	OFF	Green*	Green*	Green*
2	>7V	open/load	short	short	short	ON	ON	OFF	OFF	OFF	Green	OFF	OFF	OFF
SPLITTER Mode	>7V	open/load	short	short	open/load	ON	ON	OFF	OFF	ON	Green*	OFF	OFF	Green*
2	>7V	open/load	short	open/load	short	ON	ON	OFF	ON	OFF	Green*	OFF	Green*	OFF
v	>7V	open/load	short	open/load	open/load	ON	ON	OFF	ON	ON	Green*	OFF	Green*	Green*
	>7V	open/load	open/load	short	short	ON	ON	ON	OFF	OFF	Green*	Green*	OFF	OFF
	>7V	open/load	open/load	short	short	ON	ON	ON	OFF	ON	Green*	Green*	OFF	Green*
	>7V	open/load	open/load	open/load	short	ON	ON	ON	ON	OFF	Green*	Green*	Green*	OFF
	>7V	open/load	open/load	open/load	open/load	ON	ON	ON	ON	ON	Green*	Green*	Green*	Green*
	>7V	short	short	short	short	ON	OFF	OFF	OFF	OFF	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

#### Mechanical Specifications

Wind Speed, maximum 216 km/h (134 mph)

#### **Environmental Specifications**

-40 °C to +65 °C (-40 °F to +149 °F) **Operating Temperature** 

**Relative Humidity** 15%-100%

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

**Ingress Protection Test Method** IEC 60529:2001, IP67

**Vibration Test Method** IEC 60068-2-6

Packaging and Weights

Included Mounting hardware



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at the RF port corresponding to the LED Green lighted
Alternating LEDs is merely a mechanism to save power consumption.

Volume 5.5 L

Weight, net  $6.6 \text{ kg} \mid 14.55 \text{ lb}$  Weight, without mounting hardware  $5.2 \text{ kg} \mid 11.464 \text{ lb}$ 

