

# CBC71726-DS-43 | E14F10P43

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Triplexer 698-960/1695-2200/2300-2700, DC-sense with 4.3-10 connectors

- BTS-to-feeder and feeder-to-antenna application
- Automatic dc switching with dc sense
- New 4.3-10 connectors for improved PIM performance and size reduction

## Product Classification

**Product Type** Triplexer

## General Specifications

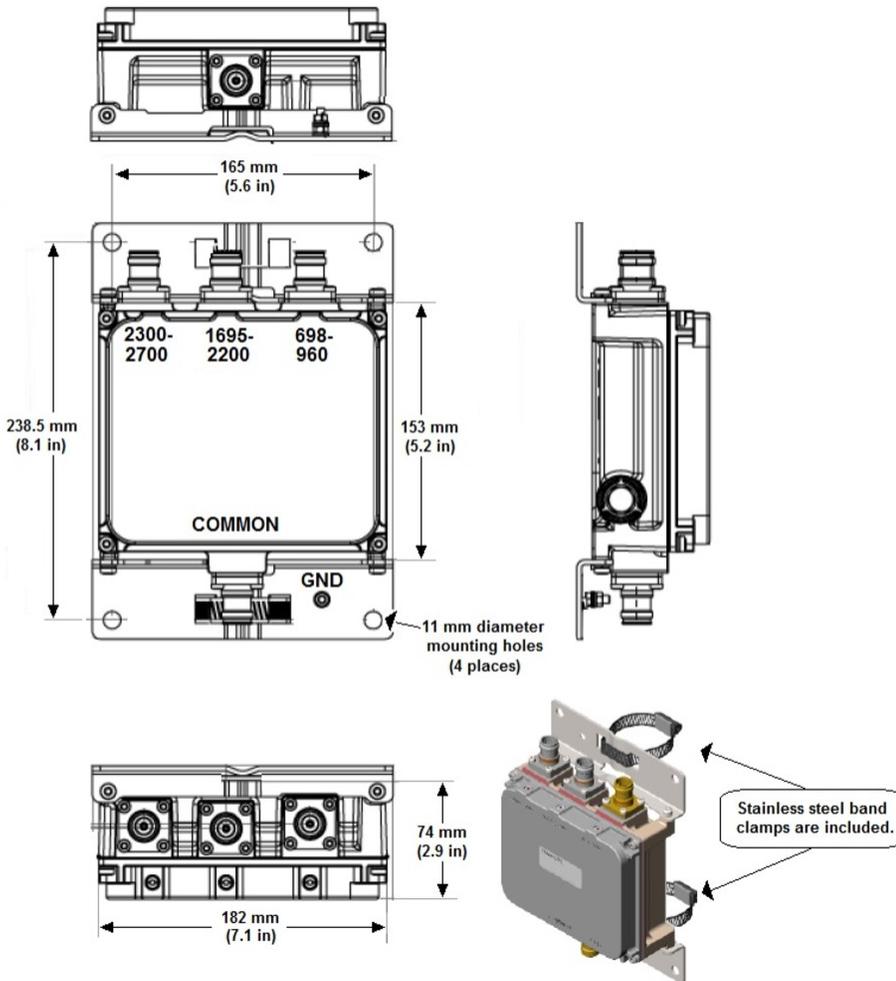
**Product Family** CBC71726  
**Color** Gray  
**Common Port Label** COMM  
**Modularity** 1-Single  
**Mounting** Pole | Wall  
**Mounting Pipe Hardware** Band clamps (2)  
**RF Connector Interface** 4.3-10 Female  
**RF Connector Interface Body Style** Long neck

## Dimensions

**Height** 153 mm | 6.024 in  
**Width** 182 mm | 7.165 in  
**Depth** 74 mm | 2.913 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 | AWS 1700 | CEL 850 | CEL 900 | DCS 1800 | EDD 800 | IMT 2100 | IMT 2600 | LMR 750 | LMR 800 | LMR 900 | PCS 1900 | USA 700 | USA 750 | WCS 2300

## Electrical Specifications, dc Power/Alarm

### dc/AISG Pass-through Method

Auto sensing

### dc/AISG Pass-through Path

See logic table

### Lightning Surge Current

5 kA

### Lightning Surge Current Waveform

8/20 waveform

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**Voltage** 7–30 Vdc

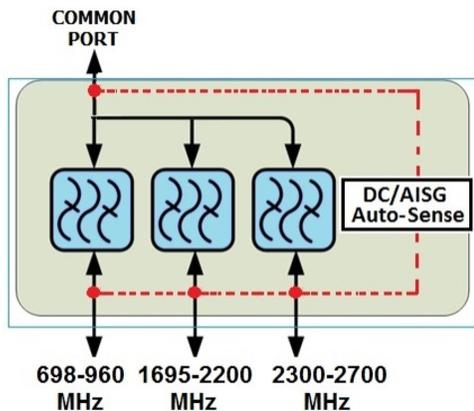
## Electrical Specifications

<b>Sub-module</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>Branch</b>	1	2	3
<b>Port Designation</b>	698-960	1695-2200	2300-2700
<b>License Band</b>	CEL 850, Band Pass CEL 900, Band Pass USA 700, Band Pass USA 750, Band Pass	AWS 1700, Band Pass DCS 1800, Band Pass IMT 2100, Band Pass PCS 1900, Band Pass	IMT 2600, Band Pass WCS 2300, Band Pass

## Electrical Specifications, Band Pass

<b>Frequency Range, MHz</b>	<b>698–960</b>	<b>1695–2200</b>	<b>2300–2700</b>
<b>Insertion Loss, typical, dB</b>	0.15	0.25	0.3
<b>Return Loss, typical, dB</b>	20	20	20
<b>Isolation, minimum, dB</b>	50	50	50
<b>Input Power, RMS, maximum, W</b>	200	200	200
<b>Input Power, PEP, maximum, W</b>	2000	2000	2000
<b>3rd Order PIM, typical, dBc</b>	-155	-155	-155
<b>3rd Order PIM Test Method</b>	Two +43 dBm carriers	Two +43 dBm carriers	Two +43 dBm carriers

## Block Diagram



## Logic Table

Combining Mode Operation (Ground Based)				DC/AISG Path Selection
RF Ports Input Voltage				
698-960 MHz	1695-2200 MHz	2300-2700 MHz	COMMON	
$7 \leq V \leq 30$	<7	<7	<7	698-960 MHz to COMMON "ON"
<7	$7 \leq V \leq 30$	<7	<7	1695-2200 MHz to COMMON "ON"
<7	<7	$7 \leq V \leq 30$	<7	2300-2700 MHz to COMMON "ON"
Any 2 or more ports active $7 \leq V \leq 30$			<7	Path selection will follow below priority: 2300-2700 (1), 698-960 (2), 1695-2200 (3)
Selected path will be indicated by "GREEN" colored LED				

Splitting Mode Operation (Tower Top)				DC/AISG Path Selection
RF Ports Impedance DC (Load sensing)				
698-960 MHz	1695-2200 MHz	2300-2700 MHz	COMMON	
open/load	short	short	$7 \leq V \leq 30$	COMMON to 700 MHz "ON"
short	open/load	short	$7 \leq V \leq 30$	COMMON to 850 MHz "ON"
short	short	open/load	$7 \leq V \leq 30$	COMMON to PCS "ON"
short	short	short	$7 \leq V \leq 30$	COMMON to AWS/WCS "ON"
Any 2 or more ports open/load impedance			$7 \leq V \leq 30$	DC/AISG will be routed to ALL ports with open/load impedance
Selected path will be indicated by "GREEN" colored LED				

## Mechanical Specifications

<b>Wind Loading at Velocity, frontal</b>	14.0 N @ 150 km/h
<b>Wind Loading at Velocity, lateral</b>	7.0 N @ 150 km/h

## Environmental Specifications

<b>Operating Temperature</b>	-40 °C to +65 °C (-40 °F to +149 °F)
<b>Relative Humidity</b>	Up to 100%
<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>	1.9 L
<b>Weight, net</b>	3.2 kg   7.055 lb
<b>Weight, without mounting hardware</b>	2.9 kg   6.393 lb

## Regulatory Compliance/Certifications

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

