

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

OBSOLETE

This product was discontinued on: February 1, 2022

Replaced By:

CTX41727-DS-43 E14F10P51

Triplexer 380-960/1695-2200/2300- 2700, DC-sense with 4.3-10 connectors

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 Range42.6–122 mm

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Outline Drawing



Electrical Specifications

Impedance

License Band, Band Pass

50 ohm

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

Sub-module	1	1	1
Branch	1	2	3
Port Designation	698-960	1695-2200	2300-2700
License Band	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

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

Block Diagram



Logic Table

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Combining Mode Operation (Ground Based) RF Ports Input Voltage				
		DC/AISG Path Selection		
698-960 MHz	1695-2200 MHz	2300-2700 MHz	COMMON	
7 ≤ V ≤ 30	<7	<7	<7	698-960 MHz to COMMON "ON"
<7	7 ≤ V ≤ 30	<7	<7	1695-2200 MHz to COMMON "ON"
<7	<7	7 ≤ V ≤ 30	<7	2300-2700 MHz to COMMON"ON"
Any 2 o	/ 2 or more ports active 7 ≤ V ≤ 30 <7 Path selection will follow below priority: 2300-2700 (1), 698-960 (2), 1695-2200 (3)		30 <7 Path selection will follow below prior 2300-2700 (1), 698-960 (2), 1695-2200	
Selected path will be indicated by "GREEN" colored LED				
	Splitting Mode Operation (Tower Top)			
RF Ports Impedance DC (Load sensing)		DC/AISG Path Selection		
698-960 MHz	1695-2200 MHz	2300-2700 MHz	COMMON	
open/load	short	short	7 ≤ V ≤ 30	COMMON to 700 MHz "ON"
short	open/load	short	7 ≤ V ≤ 30	COMMON to 850 MHz "ON"
short	short	open/load	7 ≤ V ≤ 30	COMMON to PCS "ON"
short	short	short	7 ≤ V ≤ 30	COMMON to AWS/WCS "ON"
Any 2 or m	Any 2 or more ports open/load impedance 7 ≤ V ≤ 30 DC/AISG will be routed to ALL ports with open/load impedance			
Selected path will be indicated by "GREEN" colored LED				

Mechanical Specifications

Wind Loading @ Velocity, frontal	14.0 N @ 150 km/h (3.1 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	7.0 N @ 150 km/h (1.6 lbf @ 150 km/h)

Environmental Specifications

Operating Temperature	-40 °C to +65 °C (-40 °F to +149 °F)
Relative Humidity	Up to 100%
Corrosion Test Method	IEC 60068-2-11, 30 days
Ingress Protection Test Method	IEC 60529:2001, IP67

Packaging and Weights

Included	Mounting hardware
Volume	1.9 L
Weight, net	3.2 kg 7.055 lb
Weight, without mounting hardware	2.9 kg 6.393 lb

Regulatory Compliance/Certifications

Agency

Classification

ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system



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