

CBC192123T-DS | E11F33P09



Twin Triplexer, PCS/AWS/WCS,DC Sense

- BTS-to-feeder and feeder-to-antenna application
- Automatic dc switching with dc sense
- Convertible mounting brackets

OBSOLETE

This product was discontinued on: May 31, 2019

Replaced By:

CTX192126T-DS-43 Twin Triplexer, PCS/AWS/WCS-BRS, DC Sense
E14F60P09

Product Classification

Product Type Triplexer

General Specifications

Product Family CBC192123

Color Gray

Common Port Label COMMON

Modularity 2-Twin

Mounting Pole | Wall

Mounting Pipe Hardware Band clamps (2)

RF Connector Interface 7-16 DIN Female

RF Connector Interface Body Style Long neck

Dimensions

Height 175 mm | 6.89 in

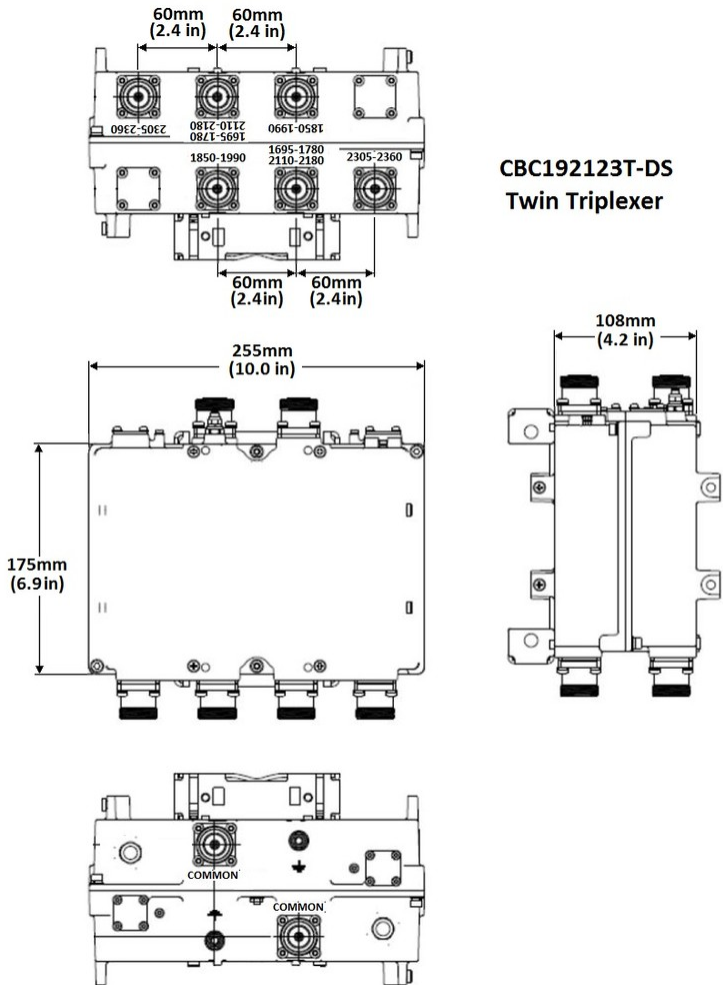
Width 255 mm | 10.039 in

Depth 108 mm | 4.252 in

Ground Screw Diameter 6 mm | 0.236 in

Mounting Pipe Diameter Range 40–160 mm

Outline Drawing



Electrical Specifications

Impedance	50 ohm
License Band, Band Pass	AWS 1700 PCS 1900 TDD 1900 TDD 2000 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
Operating Current at Voltage	15 mA @ 12 V 15 mA @ 24 V

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Voltage 7–30 Vdc

Electrical Specifications, AISG

AISG Carrier 2176 KHz ± 100 ppm
Insertion Loss, maximum 1 dB
Return Loss, minimum 15 dB

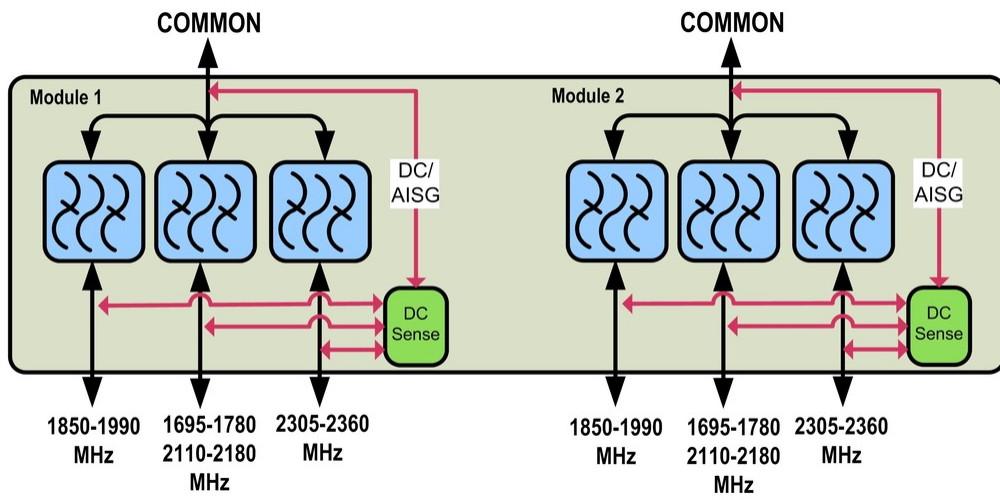
Electrical Specifications

Sub-module	1 2	1 2	1 2
Branch	1	2	3
Port Designation	AWS	PCS	WCS
License Band	AWS 1700, Band Pass PCS 1900, Band Pass		WCS 2300, Band Pass

Electrical Specifications, Band Pass

Frequency Range, MHz	1695–1780 2110–2180	1850–1990	2305–2360
Insertion Loss, typical, dB	0.3	0.3	0.3
Total Group Delay, maximum, ns	25	30	25
Total Group Delay, typical, ns	19	18	19
Return Loss, typical, dB	23	23	23
Isolation, typical, dB	53	53	53
Input Power, RMS, maximum, W	200	200	200
Input Power, PEP, maximum, W	2000	2000	2000
3rd Order PIM, typical, dBc	-153	-153	
3rd Order PIM Test Method	2 x 20 W CW tones	2 x 20 W CW tones	
Higher Order PIM, minimum, dBc			-153
Higher Order PIM Test Method			2 x 20 W CW tones

Block Diagram



Logic Table

Combining Mode Operation (Ground Based)				
RF Ports Input Voltage				
1850 to 1990 MHz	1695 to 1780 MHz 2110 to 2180 MHz	2305 to 2360 MHz	COMMON	DC/AISG Path Selection
$7 \leq V \leq 30$	<7	<7	<7	1850 to 1990 MHz to COMMON "ON" 1695 to 2180 MHz "OFF" 2305 to 2360 MHz "OFF"
<7	$7 \leq V \leq 30$	<7	<7	1850 to 1990 MHz "OFF" 1695 to 2180 MHz to COMMON "ON" 2305 to 2360 MHz "OFF"
<7	<7	$7 \leq V \leq 30$	<7	1850 to 1990 MHz "OFF" 1695 to 1710 MHz "OFF" 2110 to 2180 MHz 2305 to 2360 MHz to COMMON "ON"
$V < 7$ or $V > 30$	$V < 7$ or $V > 30$	$V < 7$ or $V > 30$	$V < 7$ or $V > 30$	ALL ports OFF
Any 2 or more ports $7 \leq V \leq 30$				ALL ports OFF

Splitting Mode Operation (Tower Top)				
RF Ports Input Voltage				
1850 to 1990 MHz	1695 to 1780 MHz 2110 to 2180 MHz	2305-2360 MHz	COMMON	DC/AISG Path Selection
<7	<7	<7	$7 \leq V \leq 30$	ALL PORTS ON*
$7 \leq V \leq 30$	<7	<7	$7 \leq V \leq 30$	ALL ports OFF (Verified at Start Up)
<7	$7 \leq V \leq 30$	<7	$7 \leq V \leq 30$	ALL ports OFF (Verified at Start Up)
<7	<7	$7 \leq V \leq 30$	$7 \leq V \leq 30$	ALL ports OFF (Verified at Start Up)

* DC/AISG will pass to all 3 Band RF Ports, External DC blocks required for proper installation

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
Weight, net	8 kg 17.637 lb