

Twin Quadplexer, 555-894/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:

CQX6192123T-DS-43 E12F23P05

Twin Quadplexer, 617-894/PCS/AWS/WCS, DC Sense, 4.3-10

Product Classification

Product Type Quadplexer

General Specifications

Product Family CBC6192123

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

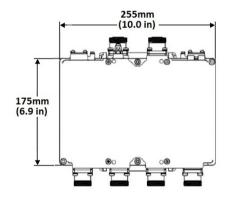
Mounting Pipe Diameter Range 40–160 mm

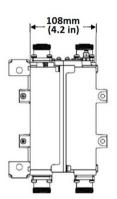


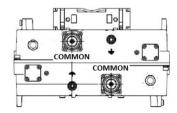
Outline Drawing



CBC6192123T-DS Twin Quadplexer







Electrical Specifications

Impedance 50 ohm

License Band, Band Pass APT 700 | AWS 1700 | CEL 850 | LMR 750 | PCS 1900 | USA 600 | USA

700 | USA 750 | WCS 2300

Electrical Specifications, dc Power/Alarm

dc/AISG Pass-through MethodAuto sensingdc/AISG Pass-through PathSee logic table

Lightning Surge Current 10 kA

Lightning Surge Current Waveform 8/20 waveform

Operating Current at Voltage 15 mA @ 12 V | 15 mA @ 24 V

Page 2 of 5



Voltage 7-30 Vdc

Electrical Specifications, AISG

AISG Carrier 2176 KHz ± 100 ppm

Insertion Loss, maximum 1 dB 15 dB Return Loss, minimum

Electrical Specifications

Sub-module	1 2	1 2	1 2	1 2
Branch	1	2	3	4
Port Designation	555-894MHz	AWS	1850-1990	WCS

License Band APT 700, Band Pass AWS 1700, Band Pass PCS 1900, Band Pass WCS 2300, Band Pass CEL 850, Band Pass LMR 750, Band Pass USA 700, Band Pass

USA 750, Band Pass USA 600, Band Pass

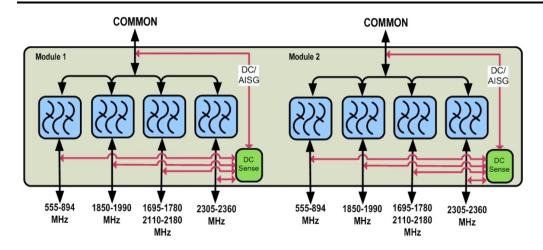
Electrical Specifications, Band Pass

Frequency Range, MHz	555-894	1695-1780 2110-2180	1850-1990	2305-2360
Insertion Loss, typical, dB	0.06	0.3	0.3	0.3
Total Group Delay, maximum, ns	5	25	30	25
Total Group Delay, typical, ns		20	17	20
Return Loss, minimum, dB	20	20	20	20
Isolation, minimum, dB	50	50	50	50
Input Power, RMS, maximum, W	200	200	200	200
Input Power, PEP, maximum, W	2000	2000	2000	2000
3rd Order PIM, typical, dBc	-155	-155	-155	
3rd Order PIM Test Method	2 x 20 W CW tones	1 x 20 W AWS CW tone 1 x 20 W PCS CW tone	2 x 20 W CW tones	
Higher Order PIM, minimum, dBc				-155

Higher Order PIM Test Method 2 x 20 W CW tones

Block Diagram





Logic Table

Combining Mode Operation (Bottom)			Combining Mode Operation (Bottom)		
	RF	Ports Input Volt			
555-894 MHz	1850-1990 MHz	1695-2180 MHz	2305-2360 MHz	COMMON	DC/AISG Path Selection
		<7			555-894 MHz COMMON "ON"
7 - 11 - 20			.7		1850-1990 MHz "OFF"
7 ≤ V ≤ 30	<7		<7	<7	1695-2180 MHz "OFF"
					2305-2360 MHz "OFF"
	7≤V≤30	<7		<7	555-894 MHz "OFF"
<7			<7		1850-1990MHz to COMMON "ON"
	/ ≤ V ≤ 3U				1695-2180MHz "OFF"
					2305-2360 MHz "OFF"
<7	<7	7 ≤ V ≤ 30	<7	<7	555-894 MHz "OFF"
					824-894 MHz "OFF"
					1695-2180 MHz to COMMON"ON"
					2305-2360 MHz "OFF"
<7	<7			<7	555-894 MHz "OFF"
		<7	7 ≤ V ≤ 30		1850-1990MHz "OFF"
					1695-2180 MHz "OFF"
					2305-2360 MHz to COMMON "ON"
V<7 or V>30	V<7 or V>30	V<7 or V>30	V<7 or V>30	V<7 or V>30	ALL ports OFF
	Any 2 or more ports 7 ≤ V ≤ 30			ALL ports OFF	

	Splitting Mode Operation (Tower Top)				
	RF Ports Input Voltage				
DC/AISG Path Selection	COMMON	2305-2360 MHz	1695-2180 MHz	1850-1990 MHz	555-894 MHz
ALL PORTS ON*	7 ≤ V ≤ 30	<7	<7	<7	<7
ALL ports OFF (Verified at Start	7 ≤ V ≤ 30	<7	<7	<7	7 ≤ V ≤ 30
ALL ports OFF (Verified at Start	7 ≤ V ≤ 30	<7	<7	7 ≤ V ≤ 30	<7
ALL ports OFF (Verified at Start	7 ≤ V ≤ 30	<7	7 ≤ V ≤ 30	<7	<7
ALL ports OFF (Verified at Start	7 ≤ V ≤ 30	7≤V≤30	<7	<7	<7

^{*} DC/AISG will pass to all 4 Band RF Ports, External DC blocks required for proper installation

Environmental Specifications

Operating Temperature $-40 \,^{\circ}\text{C} \text{ to } +65 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +149 \,^{\circ}\text{F})$

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

Ingress Protection Test MethodIEC 60529:2001, IP67



Packaging and Weights

Included Mounting hardware

Weight, net 8 kg | 17.637 lb

