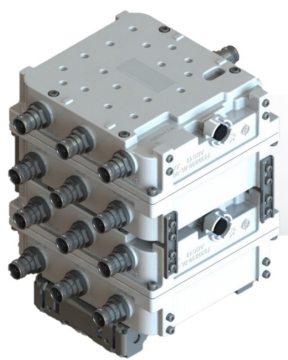


# CBC61923Q-DS-43 | E14F11P34



## Quad Triplexer, 555-894/PCS/AWS+WCS, dc Sense,4.3-10

- BTS-to-feeder and feeder-to-antenna application
- New 4.3-10 connectors for improved PIM performance and size reduction
- DC Load Sense in Feeder-to-Antenna applications
- Automatic dc switching with dc sense
- Ideal for 4T4R applications

### Product Classification

**Product Type** Triplexer

### General Specifications

**Product Family** CBC61923

**Color** Gray

**Common Port Label** Common

**Modularity** 4-Quad

**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** 176 mm | 6.929 in

**Width** 198 mm | 7.795 in

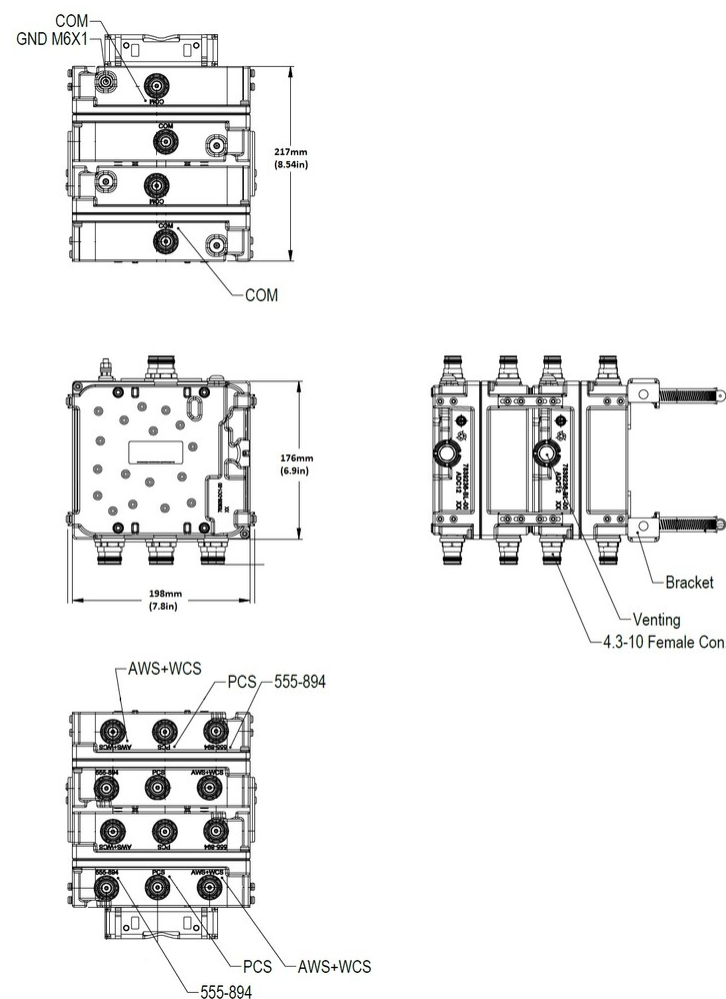
**Depth** 217 mm | 8.543 in

**Ground Screw Diameter** 6 mm | 0.236 in

**Mounting Pipe Diameter Range** 43–122 mm

### Outline Drawing

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## 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, Common Port

Composite Power, RMS	250 W
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## Electrical Specifications, dc Power/Alarm

dc/AISG Pass-through Method	Auto sensing
dc/AISG Pass-through Path	See logic table
Lightning Surge Current	10 kA
Lightning Surge Current Waveform	8/20 waveform

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Voltage7–30 Vdc

## Electrical Specifications, AISG

AISG Carrier	2176 KHz ± 100 ppm
Insertion Loss, maximum	1.4 dB
Return Loss, minimum	10 dB

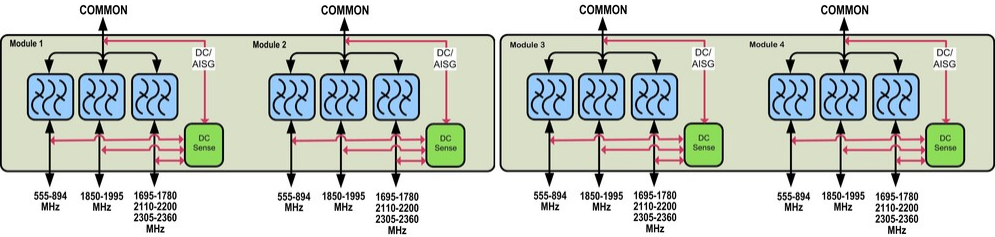
## Electrical Specifications

Sub-module	1   2   3   4	1   2   3   4	1   2   3   4
Branch	1	2	3
Port Designation	555-894MHz	PCS	AWS-WCS
License Band	APT 700, Band Pass USA 700, Band Pass USA 750, Band Pass USA 600, Band Pass CEL 850, Band Pass	PCS 1900, Band Pass	WCS 2300, Band Pass AWS 1700, Band Pass AWS 2000, Band Pass

## Electrical Specifications, Band Pass

Frequency Range, MHz	555–894	1850–1995	1695–1780 2110–2200 2305–2360
Insertion Loss, typical, dB	0.1	0.25	0.25
Total Group Delay, maximum, ns	10	20	25
Return Loss, minimum, dB	21	21	21
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, maximum, dBc	-161	-161	
3rd Order PIM Test Method	2 x 20 W CW tones	2 x 20 W CW tones	
Higher Order PIM, maximum, dBc			-161
Higher Order PIM Test Method			2 x 20 W CW tones

## Block Diagram





Logic Table

Combining Mode Operation (Ground Based)				
RF Ports Input Voltage				
555 to 894 MHz	PCS	AWS/WCS	COMMON	DC/AISG Path Selection
7 ≤ V ≤ 30	<7	<7	<7	555 to 894 MHz to COMMON "ON"
<7	7 ≤ V ≤ 30	<7	<7	PCS to COMMON "ON"
<7	<7	7 ≤ V ≤ 30	<7	AWS/WCS to COMMON "ON"
7 ≤ V ≤ 30	7 ≤ V ≤ 30	<7	<7	555 to 894 MHz to COMMON "ON"
7 ≤ V ≤ 30	<7	7 ≤ V ≤ 30	<7	AWS/WCS to COMMON "ON"
<7	7 ≤ V ≤ 30	7 ≤ V ≤ 30	<7	AWS/WCS to COMMON "ON"
7 ≤ V ≤ 30	7 ≤ V ≤ 30	7 ≤ V ≤ 30	<7	AWS/WCS to COMMON "ON"

Splitting Mode Operation (Tower Top)				
RF Ports Impedance DC (Load sensing)				
555 to 894 MHz	PCS	AWS/WCS	COMMON	DC/AISG Path Selection
open/load	short	short	7 ≤ V ≤ 30	COMMON to 555-894 "ON"
short	open/load	short	7 ≤ V ≤ 30	COMMON to PCS "ON"
short	short	open/load	7 ≤ V ≤ 30	COMMON to AWS/WCS "ON"
open/load	open/load	short	7 ≤ V ≤ 30	COMMON to 555-894 "ON" COMMON to PCS "ON"
open/load	short	open/load	7 ≤ V ≤ 30	COMMON to 555-894 "ON" COMMON to AWS/WCS "ON"
short	open/load	open/load	7 ≤ V ≤ 30	COMMON to PCS "ON" COMMON to AWS/WCS "ON"
open/load	open/load	open/load	7 ≤ V ≤ 30	ALL ports ON
short	short	short	7 ≤ V ≤ 30	ALL ports OFF

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
Mounting Hardware Weight	0.5 kg   1.102 lb
Volume	7.6 L
Weight, without mounting hardware	10 kg   22.046 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above maximum concentration value
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted

