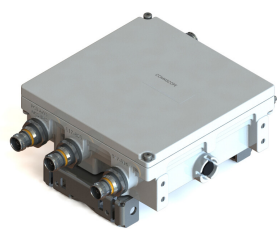


# CTX6826-DS-43 | E14F10P48



## Triplexer 600/800/AWS-PCS-WCS-BRS, DC Sense, 4.3-10

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

This product will be discontinued on: March 30, 2024

### Product Classification

**Product Type** Triplexer

### General Specifications

**Color** Gray

**Common Port Label** Common

**Modularity** 1-Single

**Mounting** Pole | Wall

**RF Connector Interface** 4.3-10 Female

**RF Connector Interface Body Style** Long neck

### Dimensions

**Height** 200 mm | 7.874 in

**Width** 200 mm | 7.874 in

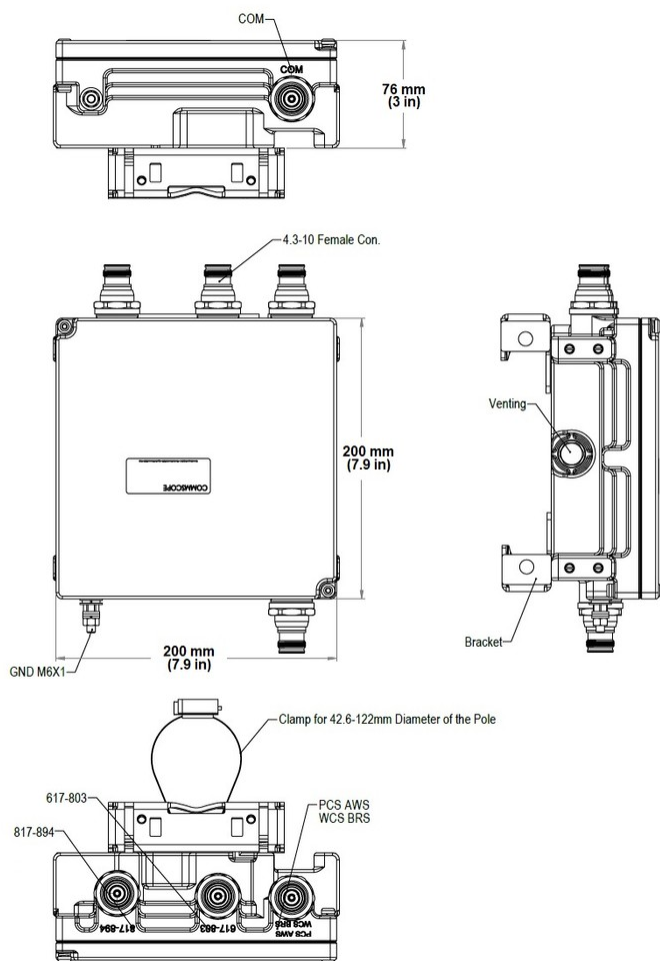
**Depth** 76 mm | 2.992 in

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

**Mounting Pipe Diameter Range** 42.6–122 mm

### Outline Drawing

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## Electrical Specifications

Impedance	50 ohm
License Band, Band Pass	AWS 1700   CEL 850   DCS 1800   IMT 2100   LMR 800   PCS 1900   TDD 2600   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 dB
Return Loss, minimum	15 dB

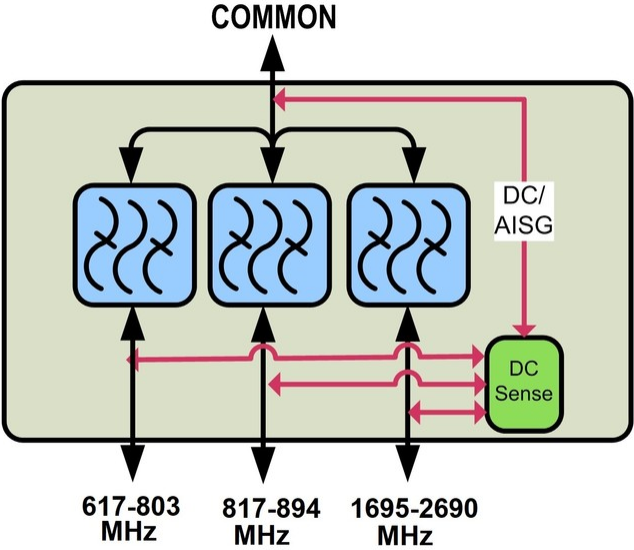
## Electrical Specifications

Sub-module	1	1	1
Branch	1	2	3
Port Designation	617-803	817-894	1695-2690
License Band	USA 700, Band Pass USA 750, Band Pass USA 600, Band Pass	CEL 850, Band Pass LMR 800, Band Pass	AWS 1700, Band Pass PCS 1900, Band Pass WCS 2300, Band Pass TDD 2600, Band Pass

## Electrical Specifications, Band Pass

Frequency Range, MHz	617–803	817–894	1695–2200 2300–2690
Insertion Loss, typical, dB	0.2	0.3	0.1
Total Group Delay, maximum, ns	60	65	25
Return Loss, typical, dB	22	22	22
Isolation, typical, dB	50	50	65
Input Power, RMS, maximum, W	120	120	200
Input Power, PEP, maximum, W	1200	1200	2000
3rd Order PIM, minimum, dBc	-161	-161	-161
3rd Order PIM Test Method	2 x 20 W CW tones	2 x 20 W CW tones	2 x 20 W CW tones

## Block Diagram



Logic Table

Combining Mode Operation (Bottom)				
PORT 1 617-803	PORT 2 817-894	PORT 3 1695-2690	COMMON	
RF Ports Input Voltage				DC/AISG Path Selection
Any*	Any*	7 ≤ V ≤ 30	<7	617-803 MHz "OFF" 817-894 MHz "OFF" 1695-2690 MHz "ON"
7 ≤ V ≤ 30	Any*	<7	<7	617-803 MHz "ON" 817-894 MHz "OFF" 1695-2690 MHz "OFF"
<7	7 ≤ V ≤ 30	<7	<7	617-803 MHz "OFF" 817-894 MHz "ON" 1695-2690 MHz "OFF"
<7	<7	<7	<7	ALL PORTS OFF

DC/AISG PORT Priority

PORT 3 [Highest]  
PORT 1  
PORT 2 [Lowest]

\* Any DC voltage applied in the ON (7-30V) or OFF (< 7V) ranges  
Note: When two or more DC/AISG are available, port with higher priority is bypassed to common

Splitting Mode Operation (Tower Top)				
RF Ports Impedance DC (Load Sense)				
PORT 1 617-803	PORT 2 817-894	PORT 3 1695-2690	COMMON	DC/AISG Path Selection
Short	Short	Short	7 ≤ V ≤ 30	ALL PORTS OFF
Open/ Load	Open/ Load	Open/ Load	7 ≤ V ≤ 30	ALL PORTS ON
One or more port(s) are Open/ Load			7 ≤ V ≤ 30	DC/AISG will be passed to ALL Open/Load port(s)

Note: In this mode DC/AISG will be passed to all detected ports and blocked at shortened ones

Environmental Specifications

Operating Temperature	-40 °C to +65 °C (-40 °F to +149 °F)
Relative Humidity	5%–100%
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	3 L
Weight, without mounting hardware	3.8 kg   8.378 lb

Regulatory Compliance/Certifications

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

