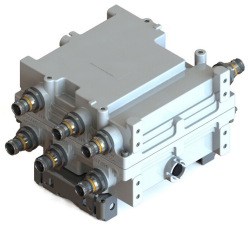
CTX6826T-DS-43 | E14F10P49



Twin 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

Product Classification

Product Type	Triplexer

General Specifications

Color	Gray
Common Port Label	Common
Modularity	2-Twin
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	127 mm | 5 in
Ground Screw Diameter	6 mm | 0.236 in
Mounting Pipe Diameter Range	42.6–122 mm

Outline Drawing

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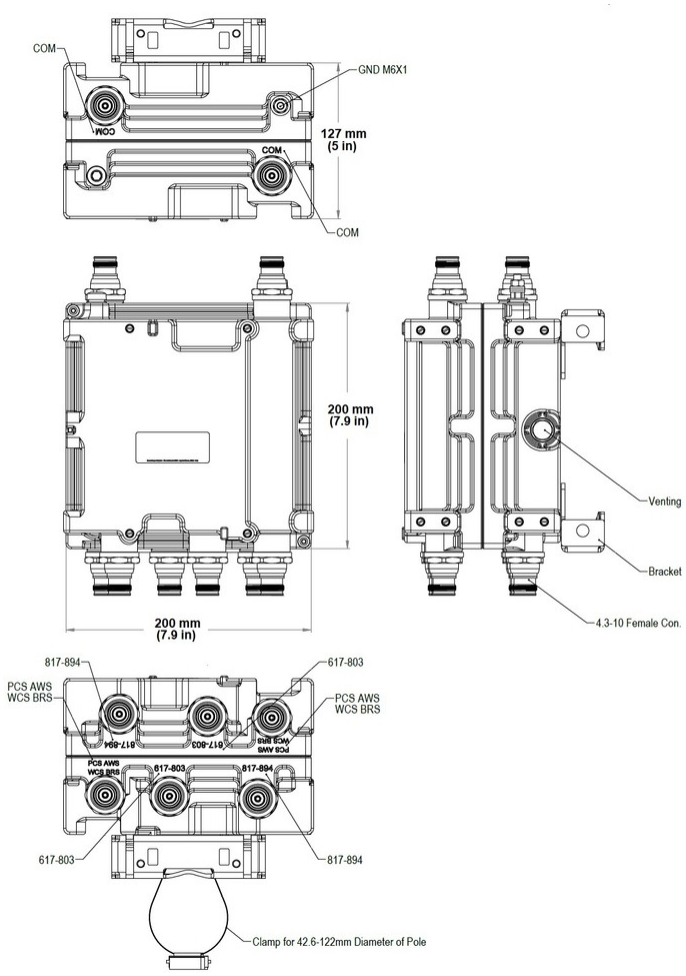


Electrical Specifications

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

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

Voltage	7–30 Vdc

Electrical Specifications, AISG

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

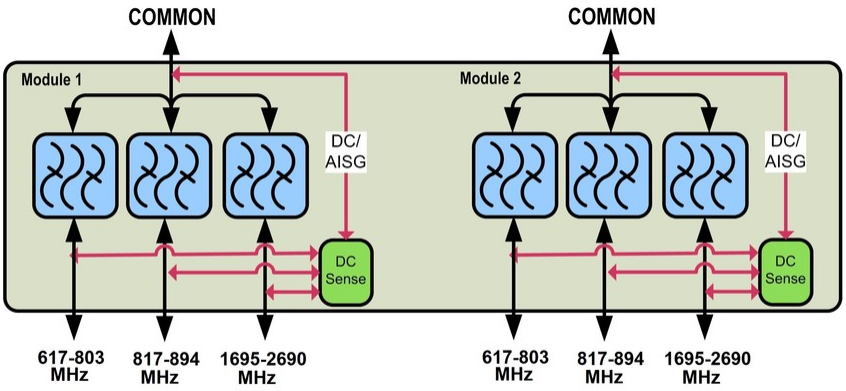
Electrical Specifications

Sub-module	**1 | 2**	**1 | 2**	**1 | 2**
Branch	1	2	3
Port Designation	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	120
Input Power, PEP, maximum, W	1200	1200	1200
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

* 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

DC/AISG PORT Priority
PORT 3 [Highest] PORT 1 PORT 2 [Lowest]

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 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	5.1 L
Weight, without mounting hardware	6 kg | 13.228 lb

Regulatory Compliance/Certifications

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