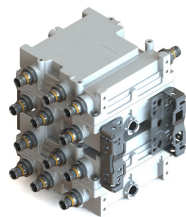


CTX6826Q-DS-43 | E14F10P50



Quad 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 4-Quad

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

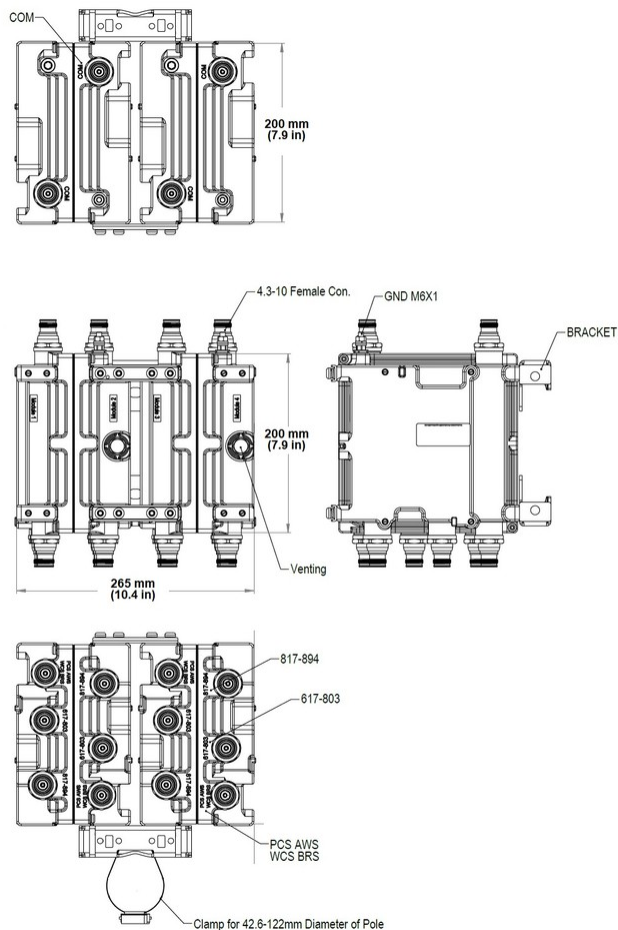
Depth 265 mm | 10.433 in

Ground Screw Diameter 6 mm | 0.236 in

Mounting Pipe Diameter Range 42.6–122 mm

Outline Drawing

CTX6826Q-DS-43 | E14F10P50



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 |

CTX6826Q-DS-43 | E14F10P50

Voltage7–30 Vdc

Electrical Specifications, AISG

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

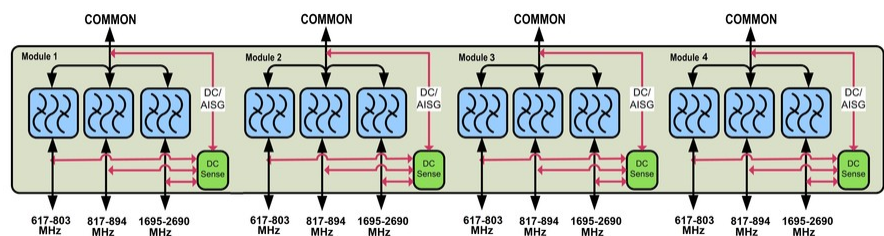
Electrical Specifications

| | | | |
|------------------|--|--|--|
| Sub-module | 1 2 3 4 | 1 2 3 4 | 1 2 3 4 |
| 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



CTX6826Q-DS-43 | E14F10P50

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* | $7 \leq V \leq 30$ | <7 | 617-803 MHz "OFF" 817-894 MHz "OFF" 1695-2690 MHz "ON" |
| $7 \leq V \leq 30$ | Any* | <7 | <7 | 617-803 MHz "ON" 817-894 MHz "OFF" 1695-2690 MHz "OFF" |
| <7 | $7 \leq V \leq 30$ | <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 | $7 \leq V \leq 30$ | ALL PORTS OFF |
| Open/ Load | Open/ Load | Open/ Load | $7 \leq V \leq 30$ | ALL PORTS ON |
| One or more port(s) are Open/ Load | | | $7 \leq V \leq 30$ | 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 | 10.6 L |
| Weight, without mounting hardware | 12.5 kg 27.558 lb |

Regulatory Compliance/Certifications

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

