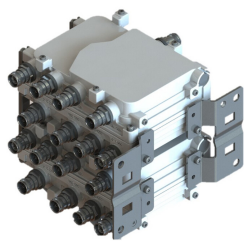


CQX6192342Q-DS-43 | E14F15P53



Quad Quadplexer 617-960/AWS-WCS/PCS/ CBR5-C-Band, DC Sense, 4.3-10 connectors

- New Combining Solution to introduce 5G, 3.5GHz band
- BTS-to-feeder and feeder-to-antenna application
- New 4.3-10 connectors for improved PIM performance and size reduction
- Automatic dc switching with dc sense

Product Classification

Product Type Quadplexer

General Specifications

Color Gray

Common Port Label COMM

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 147 mm | 5.787 in

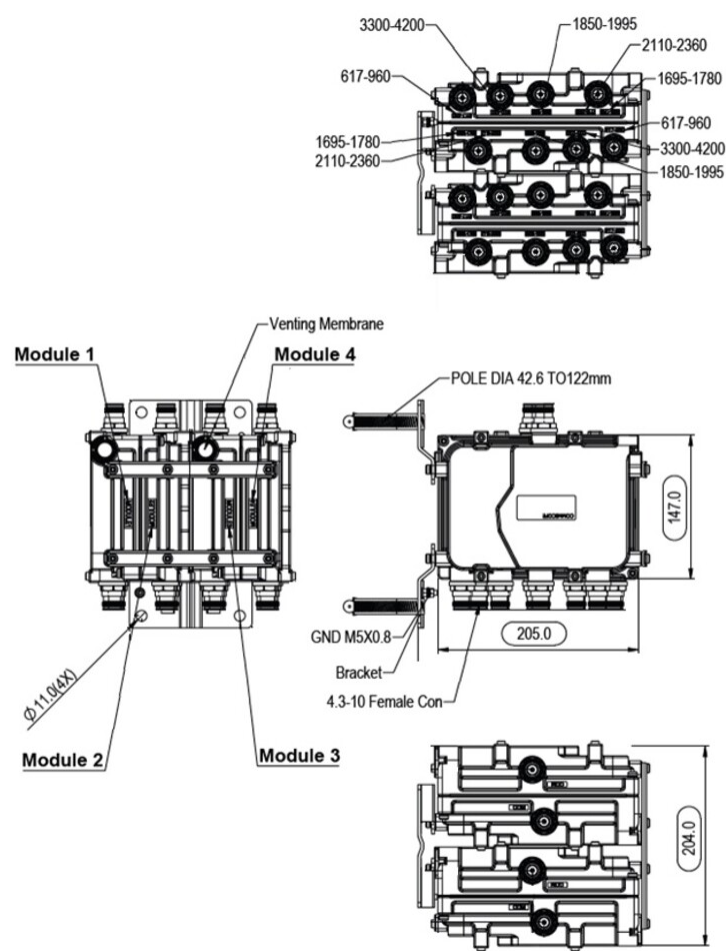
Width 205 mm | 8.071 in

Depth 204 mm | 8.032 in

Ground Screw Diameter 5 mm | 0.197 in

Mounting Pipe Diameter Range 42.6–122 mm

Outline Drawing



Electrical Specifications

Impedance	50 ohm
License Band, Band Pass	APT 700 AWS 1700 CEL 850 CEL 900 DCS 1800 EDD 800 IMT 2100 IMT 2600 LMR 750 LMR 800 LMR 900 PCS 1900 TDD 3500 USA 600 USA 700 USA 750 WCS 2300

Electrical Specifications, dc Power/Alarm

dc/AISG Pass-through Method	Auto sensing
dc/AISG Pass-through Path	See logic table
Lightning Surge Current	5 kA
Lightning Surge Current Waveform	8/20 waveform
Pass-through Current, maximum	2 A
Voltage	7–30 Vdc

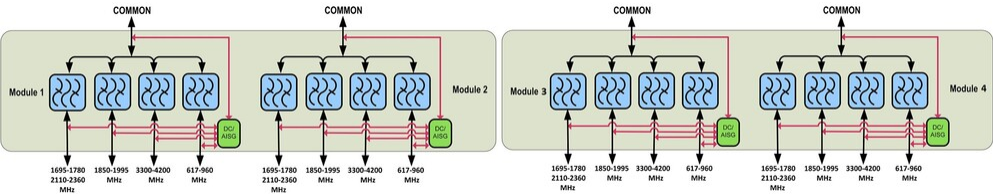
Electrical Specifications

Sub-module	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Branch	1	2	3	4
Port Designation	617-960	PCS	AWS-WCS	CBRS, C-Band
License Band	USA 700, Band Pass USA 750, Band Pass USA 600, Band Pass CEL 850, Band Pass CEL 900, Band Pass	PCS 1900, Band Pass	WCS 2300, Band Pass AWS 1700, Band Pass AWS 2000, Band Pass	TDD 3500, Band Pass

Electrical Specifications, Band Pass

Frequency Range, MHz	617-960	1850-1995	1695-1780 2110-2360	3300-4200
Insertion Loss, maximum, dB	0.3	0.3	0.3	0.3
Total Group Delay, maximum, ns	8	20	20	8
Return Loss, typical, dB	21	20	20	20
Isolation, minimum, dB	50 @ 1850-1995 50 @ 3300-4200 45 @ 1695-1780 2110-2360	50 @ 617-960 40 @ 1695-1780 50 @ 2110-2360 50 @ 3300-4200	50 @ 617-960 40 @ 1850-1995 50 @ 3300-4200	50 @ 617-960 50 @ 1695-2180 50 @ 1850-1995 50 @ 2110-2360
Input Power, RMS, maximum, W	120	120	120	80
Input Power, PEP, maximum, W	1200	1200	1200	800
3rd Order PIM, maximum, dBc	-155	-155	-155	-153
3rd Order PIM Test Method	2 x 20 W CW tones	2 x 20 W CW tones	2 x 20 W CW tones	2 x 20 W CW tones

Block Diagram



Logic Table

CQX6192342Q-DS-43 | E14F15P53

COMBINER mode priority table

Port 1695-1780 2110-2360 (highest), Port 617-960, Port 1850-1995, Port 3.3-4.2 (lowest)

PORT 617-960	PORT 1850-1995	PORT 3.3-4.2	PORT 1695-1780 2110-2360	COMMON
DC input voltage				Selected Port
any valid DC or <7V	any valid DC or <7V	any valid DC or <7V	any valid DC	PORT 1695-1780 2110-2360
any valid DC	any valid DC or <7V	any valid DC or <7V	<7V	PORT 617-960
<7V	any valid DC	any valid DC or <7V	<7V	PORT 1850-1995
<7V	<7V	any valid DC	<7V	PORT 3.3-4.2
<7V	<7V	<7V	<7V	NONE

Note: Valid DC input voltage range is 7-30V

SPLITTER mode: COMMON Port is split to Ports (1-4) with valid impedance

MODE	COMMON					PORT 617-960					PORT 1850-1995					PORT 1695-1780 2110-2360				
	COMMON	PORT 617-960	PORT 1850-1995	PORT 1695-1780 2110-2360	PORT 3.3-4.2	COMMON	PORT 617-960	PORT 1850-1995	PORT 1695-1780 2110-2360	PORT 3.3-4.2	COMMON	PORT 617-960	PORT 1850-1995	PORT 1695-1780 2110-2360	PORT 3.3-4.2					
Splitter	Input Voltage										Selected Port									
	>7V	short	short	short	openload	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	ON					
	>7V	short	short	openload	short	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	OFF					
	>7V	short	openload	short	short	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	OFF					
	>7V	openload	short	short	short	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	OFF					
	>7V	short	short	openload	openload	ON	OFF	ON	OFF	ON	ON	OFF	OFF	ON	OFF					
	>7V	short	openload	short	openload	ON	OFF	ON	OFF	ON	ON	OFF	OFF	ON	OFF					
	>7V	openload	short	short	openload	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	OFF					
	>7V	short	openload	openload	short	ON	OFF	ON	ON	OFF	ON	OFF	OFF	ON	OFF					
	>7V	openload	short	openload	short	ON	ON	OFF	ON	OFF	ON	OFF	OFF	ON	OFF					
	>7V	openload	openload	openload	openload	ON	OFF	ON	ON	OFF	ON	OFF	OFF	ON	OFF					
	>7V	openload	short	openload	openload	ON	ON	OFF	ON	OFF	ON	OFF	OFF	ON	OFF					
	>7V	openload	openload	openload	openload	ON	ON	ON	ON	OFF	ON	OFF	OFF	ON	OFF					
	>7V	openload	openload	openload	short	ON	ON	ON	ON	ON	ON	OFF	OFF	ON	OFF					
	>7V	openload	openload	openload	openload	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	ON					

Mechanical Specifications

Wind Loading @ Velocity, frontal	159.3 N @ 241 km/h (35.8 lbf @ 241 km/h)
Wind Loading @ Velocity, lateral	222.2 N @ 241 km/h (50.0 lbf @ 241 km/h)

Environmental Specifications

Operating Temperature	-40 °C to +65 °C (-40 °F to +149 °F)
Relative Humidity	Up to 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	0.2 kg 0.441 lb
Weight, without mounting hardware	7.9 kg 17.416 lb