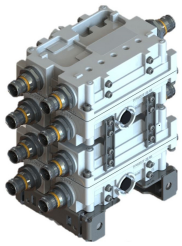
CBC426Q-DS-43 | E14F06P82



Quad Diplexer, 380–960 MHz/1695–2690 MHz,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
- Automatic dc switching with dc sense
- Convertible mounting brackets

Product Classification

Product Type	Diplexer

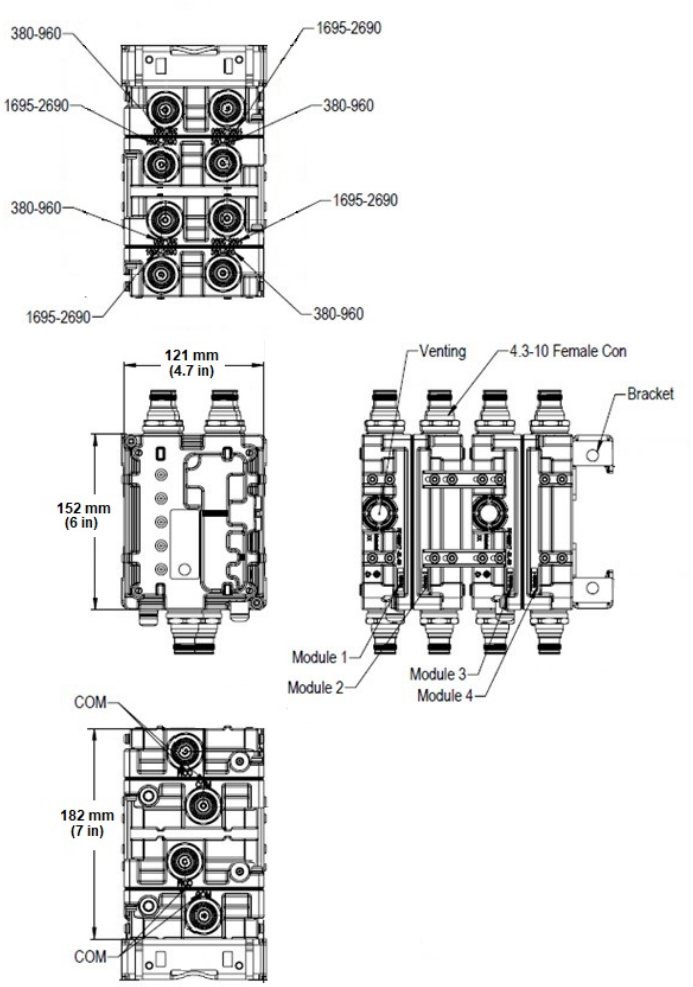
General Specifications

Product Family	CBC426
Color	Gray
Common Port Label	ANT
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	152 mm | 5.984 in
Width	121 mm | 4.764 in
Depth	182 mm | 7.165 in
Ground Screw Diameter	6 mm | 0.236 in
Mounting Pipe Diameter Range	40–160 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 1900 | TDD 2000 | TDD 2300 | TDD 2600 | USA 600 | USA 700 | USA 750

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

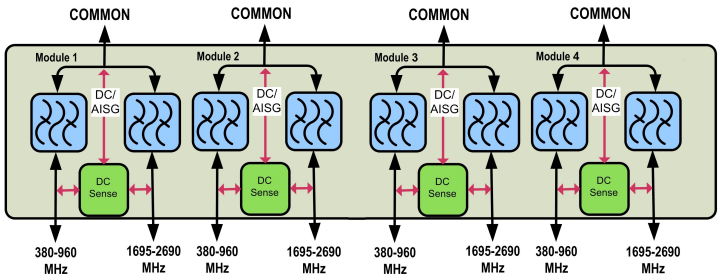
Electrical Specifications

Sub-module	**1 | 2 | 3 | 4**	**1 | 2 | 3 | 4**
Branch	1	2
Port Designation	380-960	1695-2690
License Band	LMR 750, Band Pass LMR 800, 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 TDD 2600, Band Pass

Electrical Specifications, Band Pass

Frequency Range, MHz	**380–960**	**1695–2690**
Insertion Loss, typical, dB	0.1	0.1
Total Group Delay, typical, ns	2	4
Return Loss, typical, dB	24	22
Isolation, typical, dB	65	63
Input Power, RMS, maximum, W	200	200
Input Power, PEP, maximum, W	2000	2000
3rd Order PIM, minimum, dBc	-161	-161
3rd Order PIM Test Method	2 x 20 W CW tones	2 x 20 W CW tones

Block Diagram



Logic Table

Combining Mode Operation (Ground Based)			
RF Ports Input DC Voltage			
380 to 960 MHz	1695 to 2690 MHz	COMMON	DC/AISG Path Selection
7 ≤ V ≤ 30	<7	<7	380 to 960 MHz to COMMON "ON"
<7	7 ≤ V ≤ 30	<7	1695 to 2690 MHz to COMMON "ON"
7 ≤ V ≤ 30	7 ≤ V ≤ 30	<7	1695 to 2690 MHz to COMMON "ON"

Splitting Mode Operation (Tower Top)			
RF Ports Impedance DC (Load sensing)			
380 to 960 MHz	1695 to 2690 MHz	COMMON	DC/AISG Path Selection
open/load	short	7 ≤ V ≤ 30	COMMON to 380-960 "ON"
short	open/load	7 ≤ V ≤ 30	COMMON to 1695-2690 "ON"
open/load	open/load	7 ≤ V ≤ 30	ALL ports ON
short	short	7 ≤ V ≤ 30	ALL ports OFF

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	0.6 kg | 1.323 lb
Volume	3.35 L
Weight, without mounting hardware	5.4 kg | 11.905 lb