

CDX623-DS | E15V95P58



Diplexer, 555–894 MHz/1695–2360 MHz, dc sense

- Automatic dc switching with dc sense
- dc redundancy with dummy current sink
- Convertible mounting brackets
- BTS-to-feeder and feeder-to-antenna application

OBSOLETE

This product was discontinued on: October 31, 2018

Replaced By:

CBC426-DS-43
E14F05P30

Diplexer, 380–960 MHz/1695–2690 MHz,dc Sense,4.3-10

Product Classification

Product Type Diplexer

General Specifications

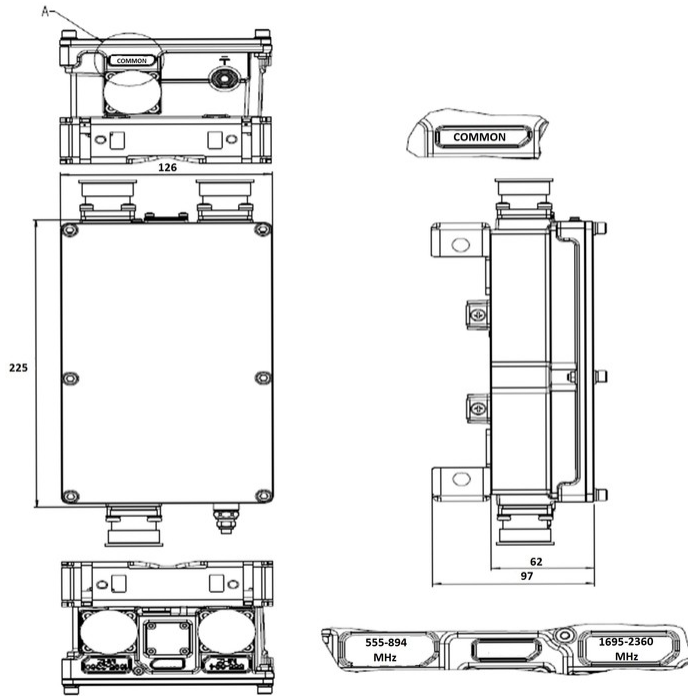
Product Family CDX623
Color Gray
Common Port Label COMMON
Modularity 1-Single
Mounting Frame | Pole | Wall
Mounting Pipe Hardware Band clamps (2)
RF Connector Interface 7-16 DIN Female
RF Connector Interface Body Style Medium neck

Dimensions

Height 225 mm | 8.858 in
Width 126 mm | 4.961 in
Depth 60 mm | 2.362 in
Ground Screw Diameter 8 mm | 0.315 in
Mounting Pipe Diameter Range 40–160 mm

CDX623-DS | E15V95P58

Outline Drawing



Electrical Specifications

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

Electrical Specifications, dc Power/Alarm

dc/AISG Pass-through, combiner	dc Sensing
dc/AISG Pass-through, demultiplexer	Branch 2
Lightning Surge Current	10 kA
Lightning Surge Current Waveform	8/20 waveform
Operating Current at Voltage	11 mA @ 12 V 13 mA @ 24 V
Voltage	7–30 Vdc

Electrical Specifications, AISG

AISG Carrier	2176 KHz \pm 100 ppm
Insertion Loss, maximum	0.5 dB
Return Loss, minimum	15 dB

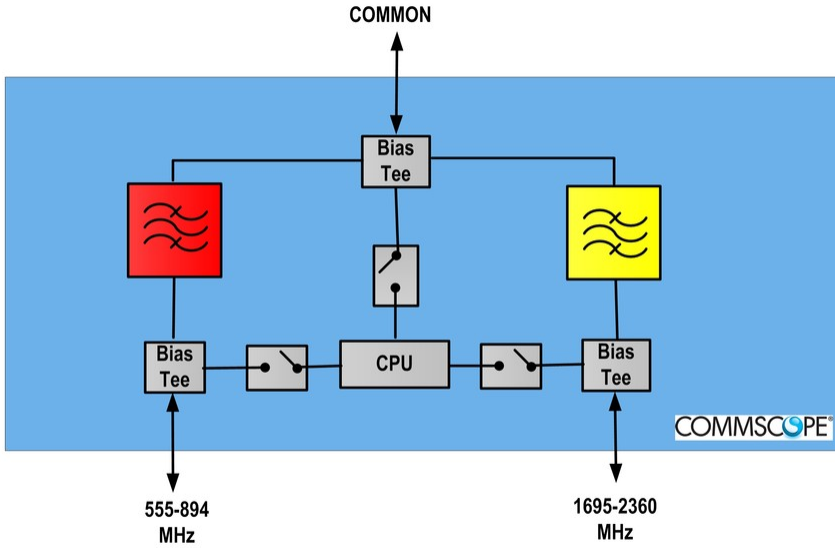
Electrical Specifications

Sub-module	1	1
Branch	1	2
Port Designation	555–894	1695–2360
License Band	APT 700, Band Pass CEL 850, Band Pass EDD 800, Band Pass LMR 750, Band Pass LMR 800, Band Pass USA 700, Band Pass USA 750, Band Pass	AWS 1700, Band Pass DCS 1800, Band Pass IMT 2100, Band Pass PCS 1900, Band Pass WCS 2300, Band Pass

Electrical Specifications, Band Pass

	555–894	1695–2360
Frequency Range, MHz	555–894	1695–2360
Insertion Loss, maximum, dB	0.15	0.15
Insertion Loss, typical, dB	0.1	0.1
Total Group Delay, maximum, ns	10	10
Return Loss, minimum, dB	22	22
Return Loss, typical, dB	25	25
Isolation, minimum, dB	60	60
Input Power, RMS, maximum, W	500	500
Input Power, PEP, maximum, W	5000	5000
3rd Order PIM, typical, dBc	-153	-153
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 Voltage			
555 to 894 MHz	1695 to 2360 MHz	COMMON	DC/AISG Path Selection
Any voltage in the 7 to 18V range that is greater than the voltage on the 1695-2360 port	Any voltage in the 7 to 18V range that is less than the voltage on the 555-894 port	<7	555-894 MHz to COMMON "ON" 1695-2360 MHz "OFF"
Any voltage in the 7 to 18V range that is less than or equal to the voltage on the 1695-2360 port	Any voltage in the 7 to 18V range that is greater than or equal to the voltage on the 555-894 port	<7	555-894 MHz "OFF" 1695-2360 MHz to COMMON "ON"
Any voltage in the 7 to 30V range.	Any voltage in the 19 to 30V range	<7	555-894 MHz "OFF" 1695-2360 MHz to COMMON "ON"
$V < 7$ or $V > 30$	$V < 7$ or $V > 30$	$V < 7$ or $V > 30$	ALL ports OFF

Splitting Mode Operation (Tower Top)			
RF Ports Input Voltage			
555 to 894	1695 to 2360	COMMON	DC/AISG Path Selection
<7	<7	Any voltage in the 7 to 30V range.	555 to 894 MHz "OFF" COMMON to 1695 to 2360 MHz "ON"
$7 \leq V \leq 30$	<7	$7 \leq V \leq 30$	ALL ports OFF (Verified at Start Up)
<7	$7 \leq V \leq 30$	$7 \leq V \leq 30$	ALL ports OFF (Verified at Start Up)

Environmental Specifications

Operating Temperature	-40 °C to +65 °C (-40 °F to +149 °F)
Relative Humidity	5%–100%
Ingress Protection Test Method	IEC 60529:2001, IP67

CDX623-DS | E15V95P58

Packaging and Weights

Included	Mounting hardware
Volume	1.7 L
Weight, net	2.8 kg 6.173 lb

Regulatory Compliance/Certifications

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

