

CDX623T-DS | E15V95P61



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

- Automatic dc switching with dc sense
- dc redundancy with dummy current sink
- Convertible mounting brackets
- Stackable to single unit with included hardware
- Stackable in multiples with included hardware
- BTS-to-feeder and feeder-to-antenna application

OBSOLETE

This product was discontinued on: December 31, 2018

Replaced By:

CBC426T-DS-43
E14F05P31

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

Product Classification

Product Type Diplexer

General Specifications

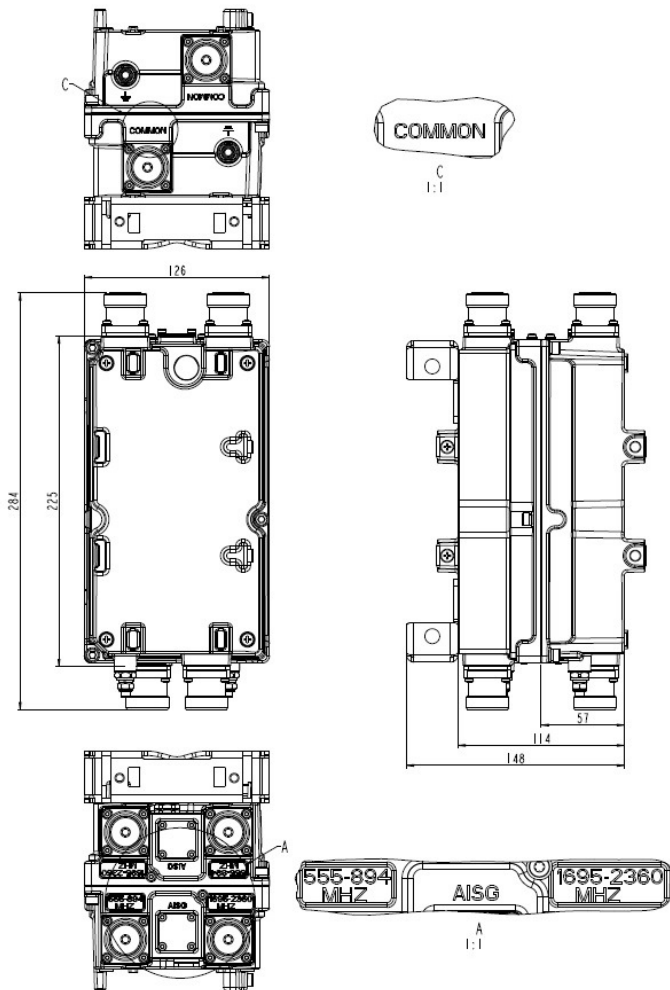
Product Family	CDX623
Color	Gray
Common Port Label	Common
Modularity	2-Twin
Mounting	Frame Pole Rack Rod Wall
Mounting Pipe Hardware	Band clamps (2)
RF Connector Interface	7-16 DIN Female
RF Connector Interface Body Style	Long neck

Dimensions

Height	225 mm 8.858 in
Width	126 mm 4.961 in
Depth	114 mm 4.488 in
Ground Screw Diameter	6 mm 0.236 in
Mounting Pipe Diameter Range	40–160 mm

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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 Method	Auto sensing
dc/AISG Pass-through Path	See logic table
Lightning Surge Current	10 kA
Lightning Surge Current Waveform	8/20 waveform
Operating Current at Voltage	14 mA @ 12 V 18 mA @ 24 V

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Voltage 7–30 Vdc

Electrical Specifications, AISG

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

Electrical Specifications

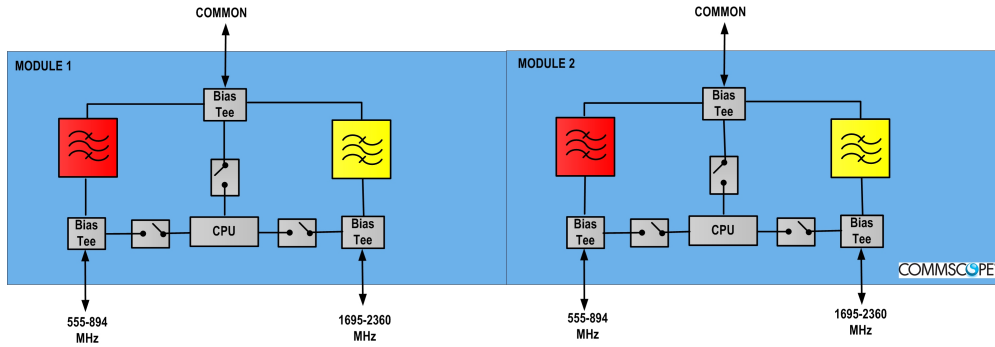
Sub-module	1 2	1 2
Branch	1	2
Port Designation	555–894	1695–2360
License Band	APT 700, Band Pass CEL 850, Band Pass EDD 800, Band Pass LMR 750, Band Pass LMR 800, Band Pass USA 700, Band Pass USA 750, Band Pass	AWS 1700, Band Pass DCS 1800, Band Pass IMT 2100, Band Pass PCS 1900, Band Pass WCS 2300,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

Electrical Specifications, Band Pass

Frequency Range, MHz	555–894	1710–2360
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	-155	-155
3rd Order PIM Test Method	2 x 20 W CW tones	2 x 20 W CW tones

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Block Diagram



Logic Table

Combining Mode Operation (Ground Based)			
RF Ports Input Voltage			DC/AISG Path Selection
555 to 894 MHz	1695 to 2360 MHz	COMMON	
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			DC/AISG Path Selection
555 to 894	1695 to 2360	COMMON	
<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%

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Corrosion Test Method IEC 60068-2-11, 30 days

Ingress Protection Test Method IEC 60529:2001, IP67

Packaging and Weights

Included Mounting hardware

Volume 3.2 L

Weight, net 4.6 kg | 10.141 lb

Regulatory Compliance/Certifications

Agency

ISO 9001:2015



Classification

Designed, manufactured and/or distributed under this quality management system