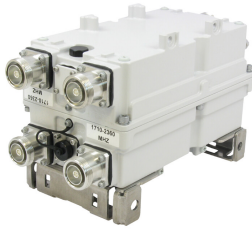


# CDX623T-DS-T | E15V95P63



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

- Automatic dc switching with dc sense
- dc redundancy with dummy current sink
- Integrated layer one converter (AISG modem)
- Convertible mounting brackets
- Stackable to single unit with included hardware
- Stackable in multiples with included hardware
- Feeder-to-antenna application

## OBSOLETE

This product was discontinued on: **March 30, 2024**

### Replaced By:

CDX623T-DS-T-43  
E16V95P63

Twin Diplexer, 555–894 MHz/1695–2360 MHz, dc sense, 4.3-10 Connectors, LOC-top

## Product Classification

**Product Type** Diplexer

## General Specifications

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

## Dimensions

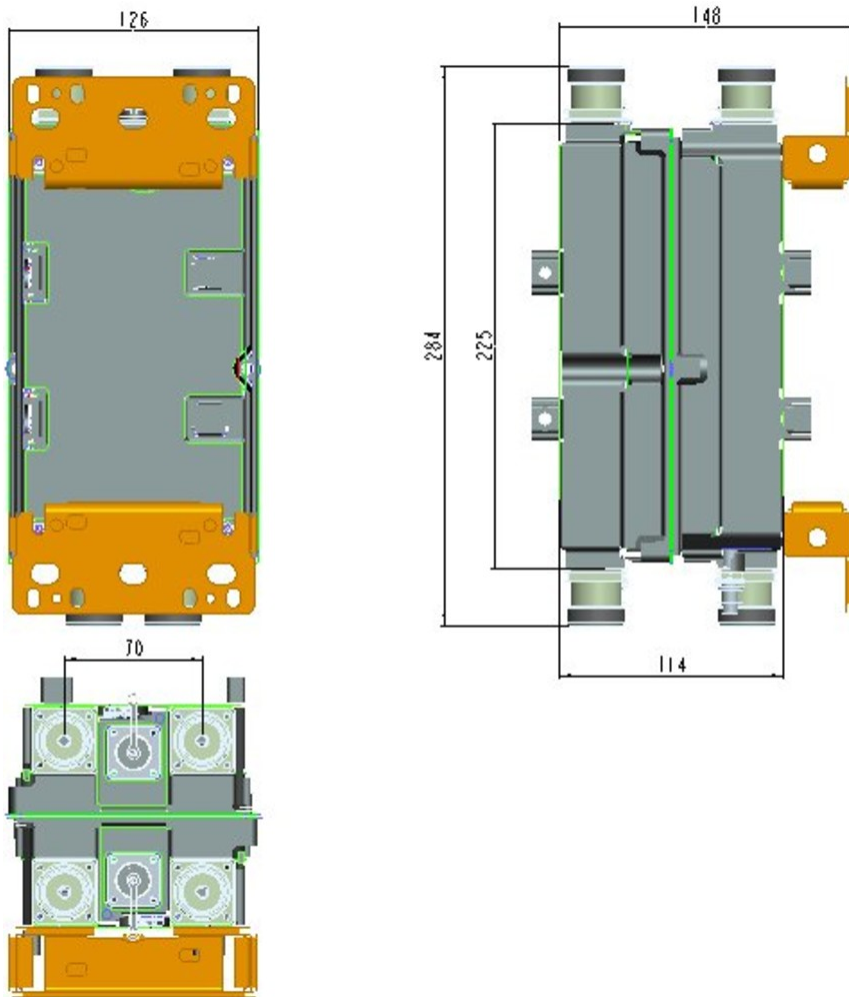
<b>Height</b>	225 mm   8.858 in
<b>Width</b>	126 mm   4.961 in
<b>Depth</b>	115 mm   4.528 in
<b>Ground Screw Diameter</b>	8 mm   0.315 in

# CDX623T-DS-T | E15V95P63

**Mounting Pipe Diameter Range**

40–160 mm

## 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

# CDX623T-DS-T | E15V95P63

<b>Operating Current at Voltage</b>	35 mA @ 12 V   37 mA @ 24 V
<b>Voltage</b>	10–30 Vdc

## Electrical Specifications, AISG

<b>AISG Carrier</b>	2176 KHz ± 100 ppm
<b>AISG Connector</b>	8-pin DIN Female
<b>AISG Connector Standard</b>	IEC 60130-9
<b>Insertion Loss, maximum</b>	0.5 dB
<b>Return Loss, minimum</b>	15 dB

## Electrical Specifications

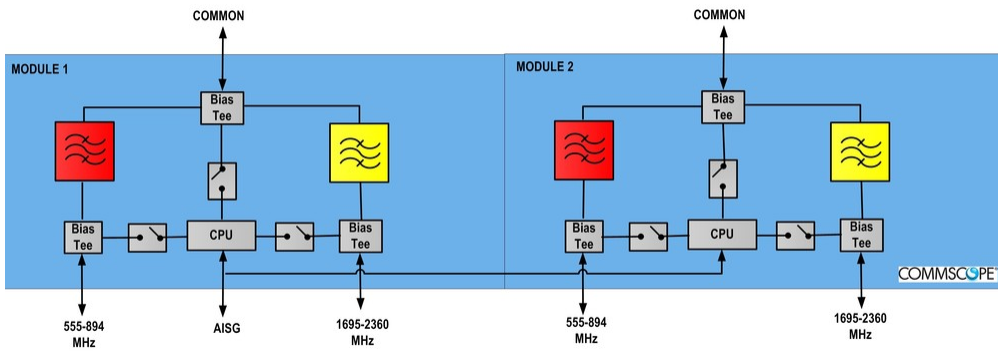
<b>Sub-module</b>	<b>1   2</b>	<b>1   2</b>
<b>Branch</b>	1	2
<b>Port Designation</b>	555–894	1695–2360
<b>License Band</b>	APT 700, Band Pass CEL 850, Band Pass EDD 800, Band Pass LMR 750, Band Pass LMR 800, Band Pass USA 700, Band Pass USA 750, Band Pass	AWS 1700, Band Pass DCS 1800, Band Pass IMT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

## Electrical Specifications, Band Pass

<b>Frequency Range, MHz</b>	<b>555–894</b>	<b>1695–2360</b>
<b>Insertion Loss, maximum, dB</b>	0.15	0.15
<b>Insertion Loss, typical, dB</b>	0.1	0.1
<b>Total Group Delay, maximum, ns</b>	10	10
<b>Return Loss, minimum, dB</b>	22	22
<b>Return Loss, typical, dB</b>	25	25
<b>Isolation, minimum, dB</b>	60	60
<b>Input Power, RMS, maximum, W</b>	500	500
<b>Input Power, PEP, maximum, W</b>	5000	5000
<b>3rd Order PIM, maximum, dBc</b>	-155	
<b>3rd Order PIM, typical, dBc</b>		-155
<b>3rd Order PIM Test Method</b>	2 x 20 W CW tones	2 x 20 W CW tones

## Block Diagram

# CDX623T-DS-T | E15V95P63



# CDX623T-DS-T | E15V95P63

## Logic Table

Combining Mode Operation (Ground Based)				
RF Ports Input Voltage				
AISG Port	555–894 MHz	1695–2360 MHz	COMMON	DC/AISG Path Selection
<10	Any voltage	>19 V	<7	AISG "OFF" 555–894 MHz "OFF" 1695–2360 MHz to COMMON "ON"
<10	7 ≤ V ≤ 30	<7 V	<7	AISG "OFF" 555–894 MHz "ON" 1695–2360 MHz "OFF"
<10	<7 V	7 ≤ V ≤ 30	<7	AISG "OFF" 555–894 MHz "OFF" 1695–2360 MHz to COMMON "ON"

Splitting Mode Operation (Tower top)				
RF Ports Input Voltage				
AISG Port	555–894 MHz	1695–2360 MHz	COMMON	DC/AISG Path Selection
Any 10-30 V	<7 V	<7 V	>7 V	AISG "ON" 555–894 MHz "OFF" 1695–2360 MHz to COMMON "OFF"

## Environmental Specifications

<b>Operating Temperature</b>	-40 °C to +65 °C (-40 °F to +149 °F)
<b>Relative Humidity</b>	5%–100%
<b>Corrosion Test Method</b>	IEC 60068-2-11, 30 days
<b>Ingress Protection Test Method</b>	IEC 60529:2001, IP67

## Packaging and Weights

<b>Included</b>	Mounting hardware
<b>Volume</b>	3.2 L
<b>Weight, net</b>	4.6 kg   10.141 lb

## Regulatory Compliance/Certifications

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