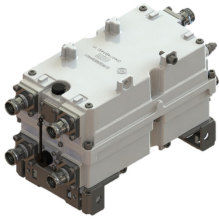


# CDX623T-DS-T-43 | E16V95P63

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

- Automatic dc switching with dc sense
- dc redundancy with dummy current sink
- Integrated layer one converter (AISG modem)
- New 4.3-10 connectors for improved PIM performance and size reduction
- Stackable in multiples with included hardware
- Convertible mounting brackets
- Feeder-to-antenna application

## Product Classification

**Product Type** Diplexer

## General Specifications

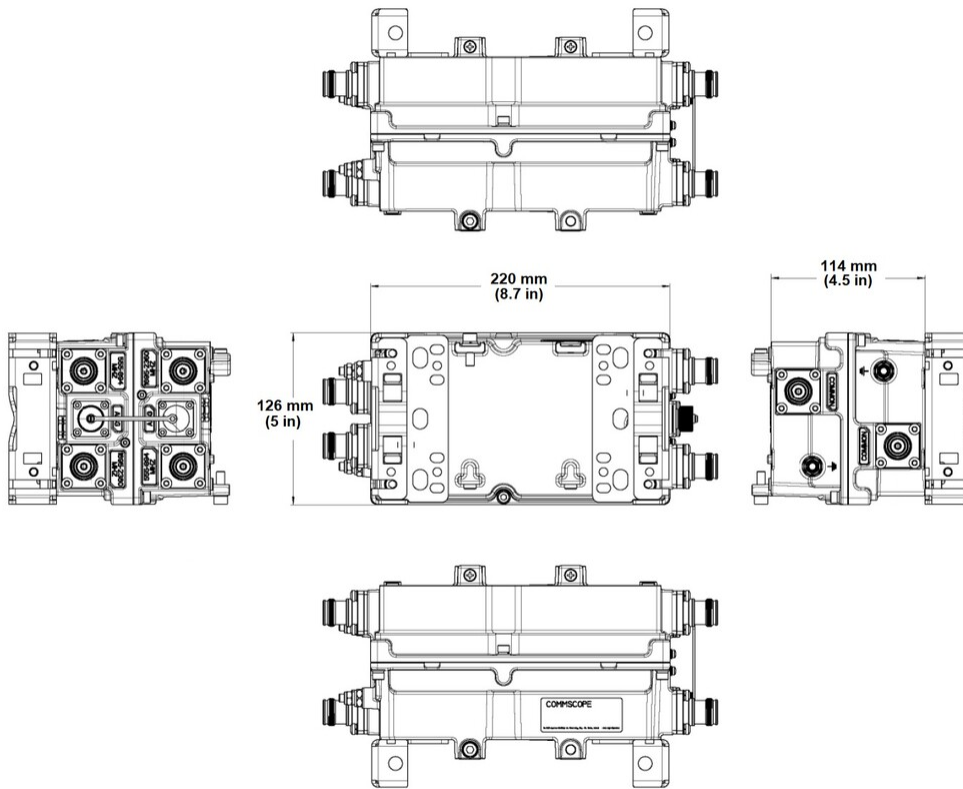
**Product Family** CDX623  
**Color** Gray  
**Common Port Label** Common  
**Modularity** 2-Twin  
**Mounting** Frame | Pole | Rack | Rod | Wall  
**Mounting Pipe Hardware** Band clamps (2)  
**RF Connector Interface** 4.3-10 Female

## Dimensions

**Height** 220 mm | 8.661 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

<b>Impedance</b>	50 ohm
<b>License Band, Band Pass</b>	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

<b>dc/AISG Pass-through Method</b>	Auto sensing
<b>dc/AISG Pass-through Path</b>	See logic table
<b>Lightning Surge Current</b>	10 kA
<b>Lightning Surge Current Waveform</b>	8/20 waveform
<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
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# CDX623T-DS-T-43 | E16V95P63

<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

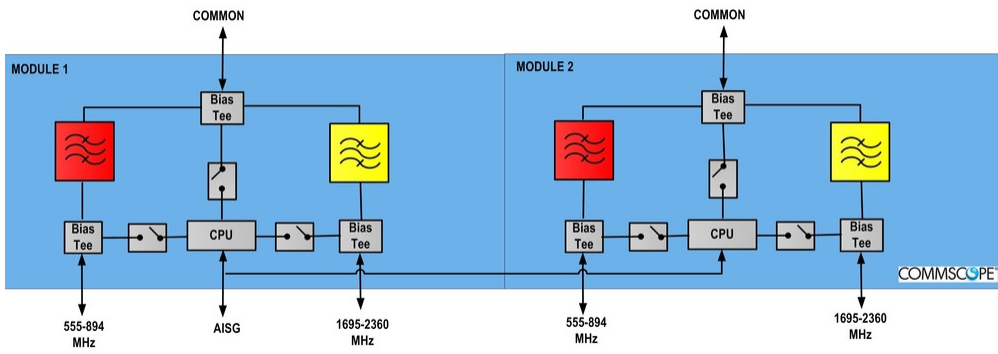
<b>Sub-module</b>	<b>1   2</b>	<b>1   2</b>
<b>Branch</b>	1	2
<b>Port Designation</b>	555–894	1695–2360
<b>License Band</b>	APT 700, Band Pass CEL 850, Band Pass EDD 800, Band Pass LMR 750, Band Pass LMR 800, Band Pass USA 700, Band Pass USA 750, Band Pass	AWS 1700, Band Pass DCS 1800, Band Pass IMT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

## Electrical Specifications, Band Pass

	<b>555–894</b>	<b>1695–2360</b>
<b>Frequency Range, MHz</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>Isolation, minimum, dB</b>	55	55
<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	-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-43 | E16V95P63



## 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, with mounting hardware</b>	4.8 kg   10.582 lb
<b>Weight, without mounting hardware</b>	4.5 kg   9.921 lb

## Regulatory Compliance/Certifications

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