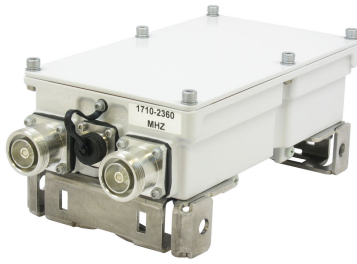


# CDX723A-DS-B | E15V95P44



Diplexer, 698–894 MHz/1710–2360 MHz, dc sense, LOC-bottom

- Automatic dc switching with dc sense
- dc redundancy with dummy current sink
- Integrated layer one converter (AISG modem)
- Convertible mounting brackets
- Stackable to twin unit with included hardware
- BTS-to-feeder application

## Product Classification

**Product Type** Diplexer

## General Specifications

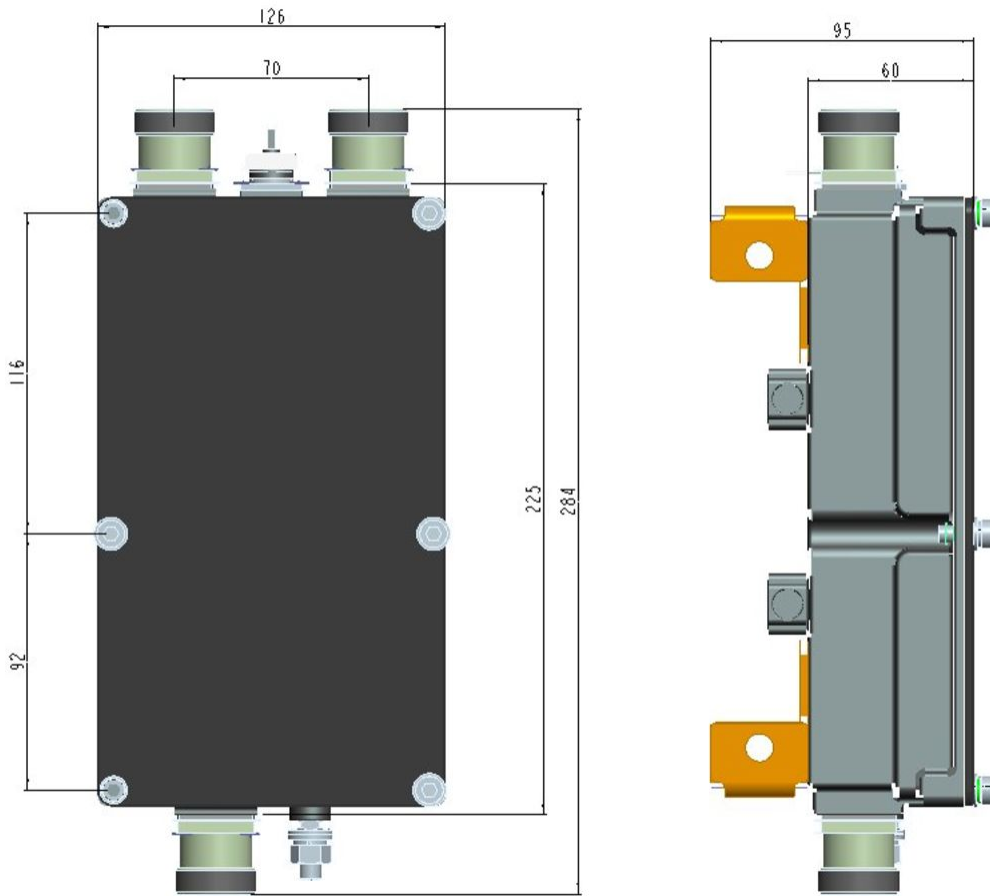
**Product Family** CDX723A  
**Color** Gray  
**Common Port Label** COMMON  
**Modularity** 1-Single  
**Mounting** Frame | Pole | Wall  
**Mounting Pipe Hardware** Band clamps (2)  
**RF Connector Interface** 7-16 DIN Female  
**RF Connector Interface Body Style** Medium neck

## Dimensions

**Height** 225 mm | 8.858 in  
**Width** 125 mm | 4.921 in  
**Depth** 60 mm | 2.362 in  
**Ground Screw Diameter** 8 mm | 0.315 in  
**Mounting Pipe Diameter Range** 40–160 mm

## Outline Drawing

# CDX723A-DS-B | E15V95P44



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

# CDX723A-DS-B | E15V95P44

---

## Electrical Specifications, AISG

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

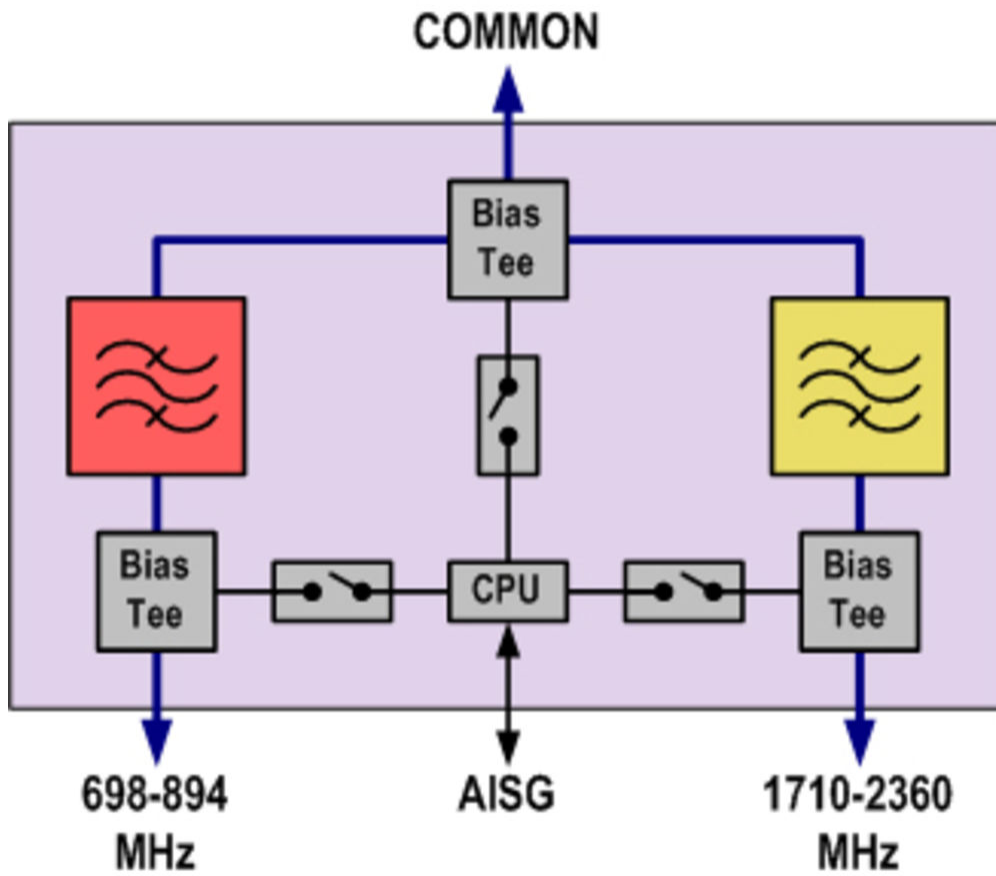
## Electrical Specifications

<b>Sub-module</b>	<b>1</b>	<b>1</b>
<b>Branch</b>	1	2
<b>Port Designation</b>	698–894	1710–2360
<b>License Band</b>	[1, 4, 7, 10, 11, 15, 16]	[2, 6, 8, 13, 17]

## Electrical Specifications, Band Pass

<b>Frequency Range, MHz</b>	<b>698–894</b>	<b>1710–2360</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, typical, 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



## Logic Table

Combining Mode Operation (Ground Based)				
RF Ports Input Voltage				
AISG Port	698–894 MHz	1710–2360 MHz	COMMON	DC/AISG Path Selection
10-30 V	Any voltage	Any voltage	<7	AISG to Common "ON" 698–894 MHz "OFF" 1710–2360 MHz "OFF"
<10	Any voltage	>19 V	<7	AISG "OFF" 698–894 MHz "OFF" 1710–2360 MHz to COMMON "ON"
<10	7 ≤ V ≤ 30	<7 V	<7	AISG "OFF" 698–894 MHz "ON" 1710–2360 MHz "OFF"
<10	<7 V	7 ≤ V ≤ 30	<7	AISG "OFF" 698–894 MHz "OFF" 1710–2360 MHz to COMMON "ON"

Splitting Mode Operation (Tower top)				
RF Ports Input Voltage				
AISG Port	698–894 MHz	1710–2360 MHz	COMMON	DC/AISG Path Selection
<10 V	Any voltage	Any voltage	>7 V	AISG "OFF" 698–894 MHz "OFF" 1710–2360 MHz to COMMON "ON"
Any 10-30 V	<7 V	<7 V	>7 V	ALL ports 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>	1.7 L
<b>Weight, net</b>	2.8 kg   6.173 lb

## Regulatory Compliance/Certifications

**Agency**

ISO 9001:2015



**Classification**

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