

Twin 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
- BTS-to-feeder application
- Stackable to single unit with included hardware
- Stackable in multiples with included hardware

OBSOLETE

This product was discontinued on: March 30, 2024

Replaced By:

CDX623T-DS-B-43 E16V95P62

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

Product Classification

Product Type Diplexer

General Specifications

Product Family CDX723A

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 Medium neck

Dimensions

 Height
 225 mm | 8.858 in

 Width
 125 mm | 4.921 in

 Depth
 115 mm | 4.528 in

 Ground Screw Diameter
 8 mm | 0.315 in

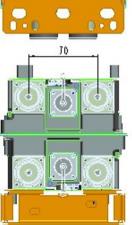


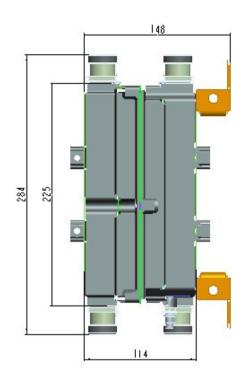
Mounting Pipe Diameter Range

40-160 mm

Outline Drawing







Electrical Specifications

Impedance 50 ohm

License Band, Band PassAPT 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, combinerdc Sensingdc/AISG Pass-through, demultiplexerBranch 2Lightning Surge Current10 kA

Lightning Surge Current Waveform 8/20 waveform

Page 2 of 5

Operating Current at Voltage 14 mA @ 12 V | 18 mA @ 24 V

Voltage 7–30 Vdc

Electrical Specifications, AISG

AISG Carrier 2176 KHz ± 100 ppm

AISG Connector 8-pin DIN Male

AISG Connector Standard IEC 60130-9

Electrical Specifications

Sub-module	1 2	1 2
Branch	1	2

Port Designation 698-894 1710-2360

License BandAPT 700, Band Pass
CEL 850, Band Pass

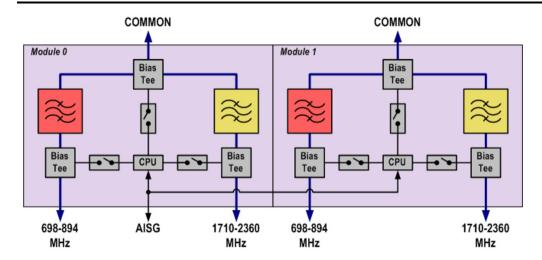
EDD 800, Band Pass LMR 750, Band Pass LMR 800, Band Pass USA 700, Band Pass USA 750, Band Pass AWS 1700, Band Pass DCS 1800, Band Pass IMT 2100, Band Pass PCS 1900, Band Pass WCS 2300, Band Pass

Electrical Specifications, Band Pass

Frequency Range, MHz	698-894	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

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
				AISG "OFF"
<10 V	Any voltage	Any voltage	>7 V	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

Operating Temperature $-40 \,^{\circ}\text{C} \text{ to } +65 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +149 \,^{\circ}\text{F})$

Relative Humidity 5%-100%

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 Classification

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

