

Twin Diplexer, 698-894 MHz/1710-2360 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: June 1, 2020

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 CDX723A

Color Gray

Common Port LabelCommonModularity2-Twin

Mounting Frame | Pole | Rack | Rod | Wall

Mounting Pipe HardwareBand clamps (2)RF Connector Interface7-16 DIN FemaleRF Connector Interface Body StyleMedium neck

Dimensions

 Height
 225 mm | 8.858 in

 Width
 125 mm | 4.921 in

 Depth
 115 mm | 4.528 in

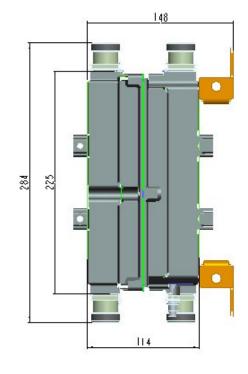
 Ground Screw Diameter
 8 mm | 0.315 in

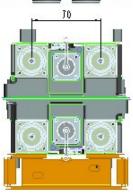
Mounting Pipe Diameter Range 40–160 mm



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

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, maximum0.5 dBReturn Loss, minimum15 dB

Electrical Specifications

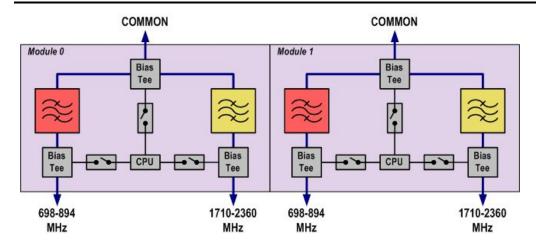
Sub-module	1 2	1 2
Branch	1	2
Port Designation	698-894	1710-2360
License Band	APT 700, Band Pass CEL 850, Band Pass EDD 800, Band Pass LMR 750, Band Pass LMR 800, Band Pass USA 700, Band Pass USA 750, Band Pass	AWS 1700, Band Pass DCS 1800, Band Pass IMT 2100, Band Pass PCS 1900, Band Pass WCS 2300, Band Pass

Electrical Specifications, Band Pass

Frequency Range, MHz	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)]	
-894 MHz	1710–2360 MHz	COMMON	DC/AISG Path Selection
voltage	>19 V	<7	698–894 MHz "OFF" 1710–2360 MHz to COMMON "ON"
: V ≤ 30	<7 V	<7	698–894 MHz "ON" 1710–2360 MHz "OFF"
<7 V	7≤ V ≤ 30	<7	698–894 MHz "OFF" 1710–2360 MHz to COMMON "ON"
or V>30	V<7 or V>30	<7	ALL ports OFF

Splitting	Splitting Mode Operation (Tower top)		
R	F Ports Input Voltage		
698-894 MHz	1710-2360 MHz	COMMON	DC/AISG Path Selection
<7 V	<7 V	>7 V	698–894 MHz "OFF" 1710–2360 MHz to COMMON "ON"
7≤ V ≤ 30	<7 V	>7 V	ALL ports OFF
<7 V	7≤ V ≤ 30	>7 V	ALL ports OFF

Environmental Specifications

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

Relative Humidity 5%-100%

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

Ingress Protection Test Method IEC 60529:2001, IP67

Packaging and Weights

IncludedMounting hardwareMounting Hardware Weight0.2 kg | 0.441 lb

Volume 3.2 L

Weight, net $4.6 \text{ kg} \mid 10.141 \text{ lb}$ Weight, without mounting hardware $3.2 \text{ kg} \mid 7.055 \text{ lb}$

Regulatory Compliance/Certifications

Agency Classification

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

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