## CDX7FNQ-DL-43 | El4F06P28



## Quad Diplexer Bl2-B5/B14, DC on Bl2-B5, 4.3-10 connectors

- Combines FirstNet public safety bands with 700/850 dual band diplexed radios
- Port 1 supports B5/B12/B17/B29 and port 2 supports B14
- Convertible mounting brackets
- DC/AISG pass through B12-B5 bands port
- Quad configuration, 4×4 MIMO ready


## Product Classification

## Product Type

General Specifications

Diplexer

| Color | Gray |
| :--- | :--- |
| Common Port Label | Common |
| Modularity | $4-Q u a d$ |
| Mounting | Pole \| Wall |
| Mounting Pipe Hardware | Band clamps (2) |
| RF Connector Interface | $4.3-10$ Female |
| RF Connector Interface Body Style | Long neck |

Dimensions

| Height | $180 \mathrm{~mm} \mid 7.087 \mathrm{in}$ |
| :--- | :--- |
| Width | $243 \mathrm{~mm} \mid 9.567 \mathrm{in}$ |
| Depth | $159 \mathrm{~mm} \mid 6.26 \mathrm{in}$ |
| Ground Screw Diameter | $5 \mathrm{~mm} \mid 0.197 \mathrm{in}$ |

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## Electrical Specifications

## Impedance

50 ohm
License Band, Band Pass

## Electrical Specifications, dc Power/Alarm

dc/AISG Pass-through Method
dc/AISG Pass-through Path
Lightning Surge Current
Lightning Surge Current Waveform

Factory set
Branch 1
5 kA
8/20 waveform

Electrical Specifications, AISG
AISG Carrier

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Insertion Loss, maximum
Return Loss, minimum

## Electrical Specifications

Sub-module
Branch
Port Designation
License Band

1|2|3|4
1
B12-B5
USA 700, Band Pass

1|2|3|4
1

B12-B5
CEL 850, Band Pass

824-894
0.4

15
20
35
160
1600
-155
$2 \times 20$ W CW tones
$1|2| 3 \mid 4$
2

B14
LMR 750, Band Pass

## Electrical Specifications, Band Pass

Frequency Range, MHz
Insertion Loss, maximum, dB
Total Group Delay, maximum, ns
Return Loss, typical, dB
Isolation, minimum, dB
Input Power, RMS, maximum, W
Input Power, PEP, maximum, W
3rd Order PIM, maximum, dBc
3rd Order PIM Test Method

20
698-746
0.4

45

35
160
1600
-155
$2 \times 20$ W CW tones

758-798
0.55

50
20
35
160
1600
-155
$2 \times 20$ W CW tones

Block Diagram


## Mechanical Specifications

Wind Loading @ Velocity, frontal
Wind Loading @ Velocity, lateral
64.0 N @ 150 km/h (14.4 lbf @ 150 km/h)
32.0 N @ 150 km/h (7.2 lbf @ 150 km/h)

## Environmental Specifications

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

## CDX7FNQ-DL-43 | E14F06P28

Relative Humidity
Corrosion Test Method
Ingress Protection Test Method
Packaging and Weights
Included
Mounting Hardware Weight
Volume
Weight, without mounting hardware

5\%-100\%
IEC 60068-2-11, 30 days
IEC 60529:2001, IP67

Mounting hardware
$0.5 \mathrm{~kg} \mid 1.102 \mathrm{lb}$
6.9 L
$8.4 \mathrm{~kg} \mathrm{\mid} 18.519 \mathrm{lb}$

