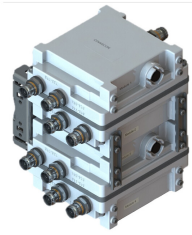


# CDX7FNQ-DL-43 | E14F06P28

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## Quad Diplexer B12-B5/B14, DC on B12-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, 4x4 MIMO ready

## Product Classification

**Product Type** Diplexer

## General Specifications

**Color** Gray

**Common Port Label** Common

**Modularity** 4-Quad

**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 mm | 7.087 in

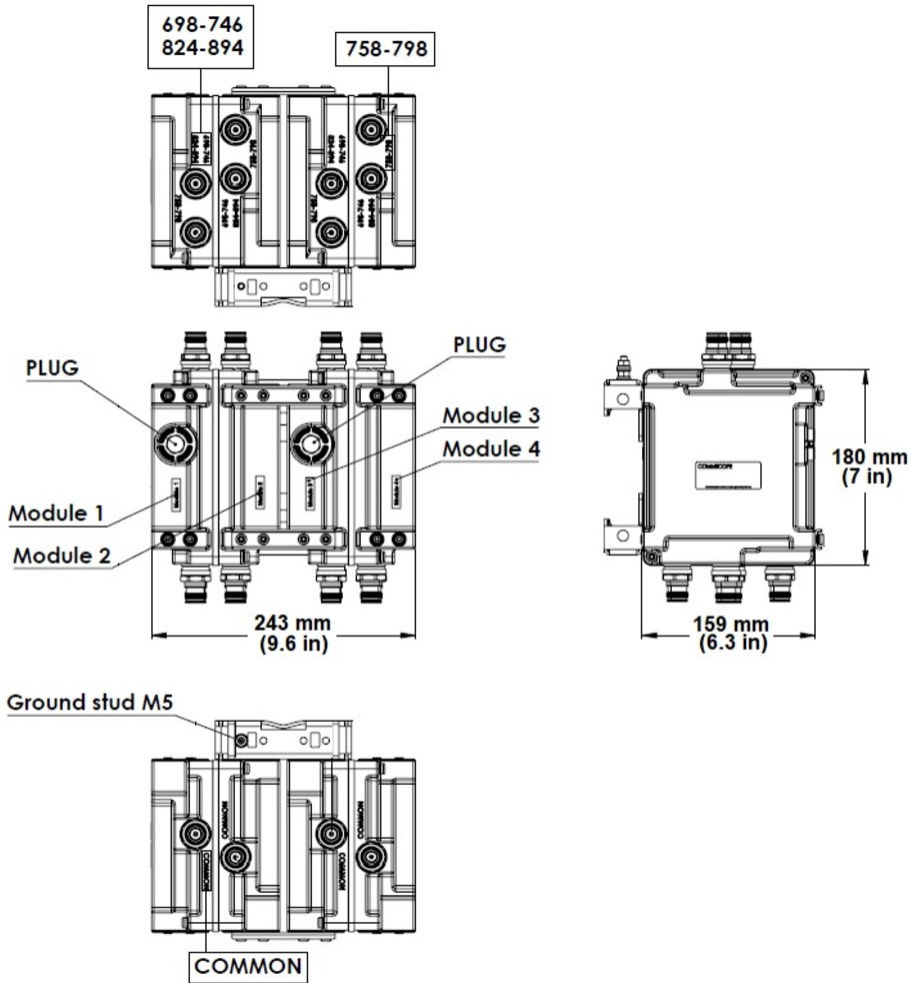
**Width** 243 mm | 9.567 in

**Depth** 159 mm | 6.26 in

**Ground Screw Diameter** 5 mm | 0.197 in

## Outline Drawing

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## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>License Band, Band Pass</b>	CEL 850   LMR 750   USA 700

## Electrical Specifications, dc Power/Alarm

<b>dc/AISG Pass-through Method</b>	Factory set
<b>dc/AISG Pass-through Path</b>	Branch 1
<b>Lightning Surge Current</b>	5 kA
<b>Lightning Surge Current Waveform</b>	8/20 waveform

## Electrical Specifications, AISG

<b>AISG Carrier</b>	2176 KHz $\pm$ 100 ppm
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<b>Insertion Loss, maximum</b>	0.5 dB
<b>Return Loss, minimum</b>	18 dB

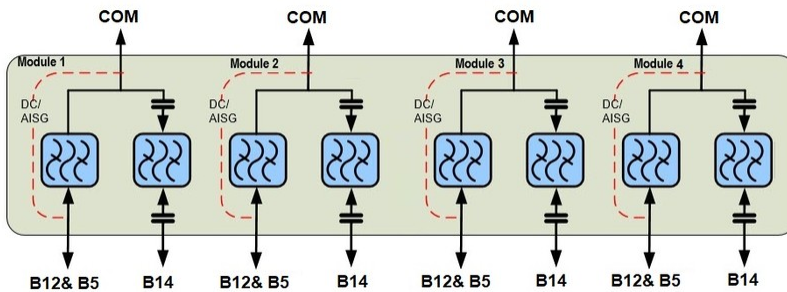
## Electrical Specifications

<b>Sub-module</b>	<b>1   2   3   4</b>	<b>1   2   3   4</b>	<b>1   2   3   4</b>
<b>Branch</b>	1	1	2
<b>Port Designation</b>	B12-B5	B12-B5	B14
<b>License Band</b>	USA 700, Band Pass	CEL 850, Band Pass	LMR 750, Band Pass

## Electrical Specifications, Band Pass

<b>Frequency Range, MHz</b>	<b>698–746</b>	<b>824–894</b>	<b>758–798</b>
<b>Insertion Loss, maximum, dB</b>	0.4	0.4	0.55
<b>Total Group Delay, maximum, ns</b>	45	15	50
<b>Return Loss, typical, dB</b>	20	20	20
<b>Isolation, minimum, dB</b>	35	35	35
<b>Input Power, RMS, maximum, W</b>	160	160	160
<b>Input Power, PEP, maximum, W</b>	1600	1600	1600
<b>3rd Order PIM, maximum, dBc</b>	-155	-155	-155
<b>3rd Order PIM Test Method</b>	2 x 20 W CW tones	2 x 20 W CW tones	2 x 20 W CW tones

## Block Diagram



## Mechanical Specifications

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

## Environmental Specifications

<b>Operating Temperature</b>	-40 °C to +65 °C (-40 °F to +149 °F)
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<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>Mounting Hardware Weight</b>	0.5 kg   1.102 lb
<b>Volume</b>	6.9 L
<b>Weight, without mounting hardware</b>	8.4 kg   18.519 lb