

Ultra-Compact Twin Diplexer PCS-AWS/BRS, DC/AISG on PCS-AWS, NEX10 Connectors

- Ideal for small cell applications
- dc/AISG pass-through on low frequency ports
- Industry leading PIM performance
- Miniature NEX10™ series connector for superior PIM and compact size

#### **Product Classification**

Product Type Diplexer

General Specifications

**Color** Gray

Common Port Label Common

Modularity 2-Twin

**RF Connector Interface** NEX10 Female

RF Connector Interface Body Style Long neck

**Dimensions** 

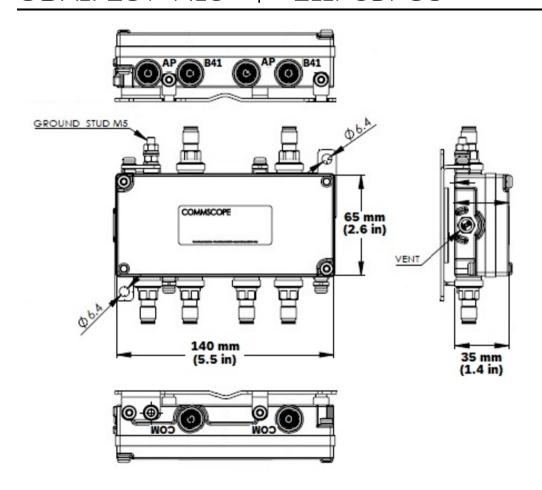
 Height
 65 mm | 2.559 in

 Width
 140 mm | 5.512 in

 Depth
 35 mm | 1.378 in

Outline Drawing





### **Electrical Specifications**

**Impedance** 50 ohm

**License Band, Band Pass** AWS 1700 | AWS 2000 | PCS 1900 | TDD 2600

#### Electrical Specifications, dc Power/Alarm

dc/AISG Pass-through MethodFactory setdc/AISG Pass-through PathBranch 1dc/AISG Pass-through, combinerBranch 1dc/AISG Pass-through, demultiplexerBranch 1Lightning Surge Current5 kA

Lightning Surge Current Waveform8/20 waveformVoltage10-30 Vdc

Electrical Specifications, AISG

**COMMSCOPE®** 

#### **AISG Carrier**

2.176 MHz ± 100 ppm

## **Electrical Specifications**

| Sub-module | 1   2 | 1   2 |
|------------|-------|-------|
| Branch     | 1     | 2     |

Port DesignationPCS-AWSBRS (B41)

License Band PCS 1900, Band Pass TDD 2600, Band Pass AWS 1700, Band Pass

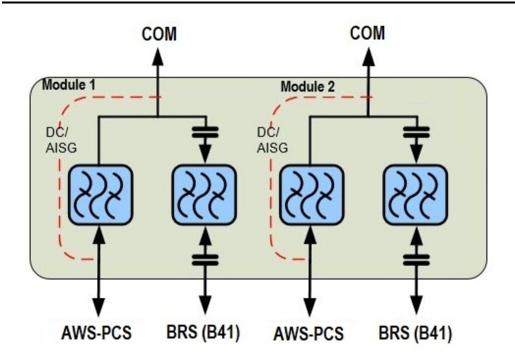
AWS 2000, Band Pass

## Electrical Specifications, Band Pass

| Frequency Range, MHz           | 1695-2200            | 2496-2700            |
|--------------------------------|----------------------|----------------------|
| Insertion Loss, typical, dB    | 0.1                  | 0.15                 |
| Total Group Delay, maximum, ns | 15                   | 15                   |
| Return Loss, minimum, dB       | 20                   | 20                   |
| Isolation, minimum, dB         | 35                   | 35                   |
| Input Power, RMS, maximum, W   | 70                   | 70                   |
| Input Power, PEP, maximum, W   | 1500                 | 1500                 |
| 3rd Order PIM, maximum, dBc    | -161                 | -161                 |
| 3rd Order PIM Test Method      | Two +43 dBm carriers | Two +43 dBm carriers |

## Block Diagram





## Material Specifications

**Finish** Painted

#### **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** Up to 100%

Ingress Protection Test Method IEC 60529:2001, IP67

Packaging and Weights

**Included** Mounting hardware

Mounting Hardware Weight 0.13 kg | 0.287 lb

Volume 0.32 L

Weight, without mounting hardware 0.72 kg | 1.587 lb