Compact Quad WCS IMF for Aeronautical Mobile Telemetry Band Co-Location, 4.3-10

- New 4.3-10 connectors for improved PIM performance and size reduction
- DC/AISG passing capability from BTS port to ANT port
- Convertible mounting brackets
- Small size excellent for metro cell applications

Product Classification

Product Type: Interference mitigation filter

General Specifications

Color: Gray
Modularity: 4-Quad
Mounting Pipe Hardware: Band clamps (2)
RF Connector Interface: 4.3-10 Female

Dimensions

Height: 162 mm | 6.378 in
Width: 206 mm | 8.11 in
Depth: 176 mm | 6.929 in

Outline Drawing
## Electrical Specifications, dc Power/Alarm

**dc/AISG Pass-through Path**  
Branch 1

**Lightning Surge Current**  
8 kA

**Lightning Surge Current Waveform**  
8/20 waveform

## Electrical Specifications

<table>
<thead>
<tr>
<th>Sub-module</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branch</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Port Designation</td>
<td>Uplink</td>
<td>Downlink</td>
<td>Downlink</td>
<td>Downlink</td>
</tr>
</tbody>
</table>

## Electrical Specifications, Band Pass

<table>
<thead>
<tr>
<th>Frequency Range, MHz</th>
<th>2305–2315</th>
<th>2350–2357</th>
<th>2357–2358.6</th>
<th>2358.6–2358.96</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insertion Loss, maximum, dB</td>
<td>0.7</td>
<td>0.6</td>
<td>1.2</td>
<td>1.8</td>
</tr>
<tr>
<td>Insertion Loss, typical, dB</td>
<td>0.5</td>
<td>0.5</td>
<td>0.8</td>
<td>1.3</td>
</tr>
</tbody>
</table>
### Total Group Delay, maximum, ns
- 35
- 380
- 550
- 550

### Return Loss, minimum, dB
- 18
- 18
- 18
- 18

### Return Loss, typical, dB
- 20
- 20
- 20
- 20

### Input Power, RMS, maximum, W
- 100
- 100
- 100

### Input Power, PEP, maximum, W
- 1000
- 1000
- 1000

### Higher Order PIM, minimum, dBc
- -160
- -160
- -160

### Higher Order PIM Test Method
- 2 x 20 W CW tones
- 2 x 20 W CW tones
- 2 x 20 W CW tones

### Electrical Specifications, Band Reject
- **Frequency Range, MHz**: 2360–2395
- **Attenuation, minimum, dB**: 43

### Block Diagram

![Block Diagram Image]

### Mechanical Specifications
- **Wind Loading at Velocity, frontal**: 48.0 N @ 150 km/h
- **Wind Loading at Velocity, lateral**: 37.0 N @ 150 km/h

### Environmental Specifications
- **Operating Temperature**: -40 °C to +65 °C (-40 °F to +149 °F)
- **Relative Humidity**: Up to 100%
- **Ingress Protection Test Method**: IEC 60529:2001, IP67
Packaging and Weights

<table>
<thead>
<tr>
<th>Included</th>
<th>Mounting hardware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight, net</td>
<td>8.1 kg</td>
</tr>
</tbody>
</table>