

Ultra Compact Twin Diplexer 1710-2180/2500-2690 MHz, 4.3-10 connectors

- Ideal for small cell applications
- Compact form factor with reduced size and weight
- Suitable for space limited applications like Metro Cell, Lamp Pole, Concealment Solution and Macro Site
- Industry leading PIM performance
- New 4.3-10 connectors for improved PIM performance and size reduction
- Designed for network modernization application, introduction of LTE 4x4 MIMO
- Also available in a quad configuration to support 4 x 4 requirements
- Twin configuration

Product Classification

Product Type Diplexer

General Specifications

Product Family CBC1726

Color Gray

Common Port LabelCommonModularity2-Twin

RF Connector Interface 4.3-10 Female

RF Connector Interface Body Style Long neck

Dimensions

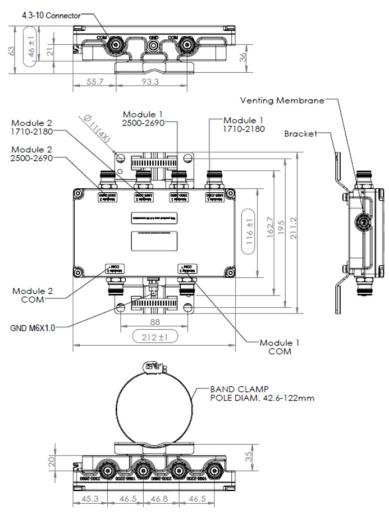
 Height
 212 mm | 8.346 in

 Width
 116 mm | 4.567 in

 Depth
 46 mm | 1.811 in



Outline Drawing



Electrical Specifications

Impedance 50 ohm

License Band, Band Pass AWS 1700 | DCS 1800 | IMT 2100 | IMT 2600 | PCS 1900 | TDD

2300 | TDD 2600 | WCS 2300

Electrical Specifications, dc Power/Alarm

dc/AISG Pass-through MethodNo dc/AISG pass-throughdc/AISG Pass-through, combinerdc/AISG blocking on all portsdc/AISG Pass-through, demultiplexerdc/AISG blocking on all ports

Lightning Surge Current 5 kA

Lightning Surge Current Waveform 8/20 waveform

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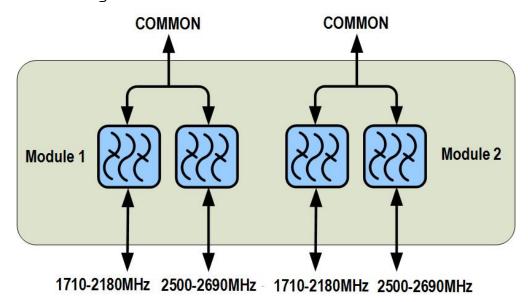
Electrical Specifications

Sub-module	1 2	1 2
Branch	1	2
Port Designation	Port 1710-2180	Port 2500-2690
License Band	DCS 1800, Band Pass IMT 2100, Band Pass AWS 1700, Band Pass PCS 1900, Band Pass	TDD 2600, Band Pass IMT 2600, Band Pass

Electrical Specifications, Band Pass

Frequency Range, MHz	1710-2180	2500-2690
Insertion Loss, typical, dB	0.1	0.12
Total Group Delay, maximum, ns	12	12
Return Loss, typical, dB	23	23
Isolation, typical, dB	51	53
Input Power, RMS, maximum, W	250	250
Input Power, PEP, maximum, W	1500	1500
3rd Order PIM, typical, dBc	-161	-161
3rd Order PIM Test Method	2 x 20 W CW tones	2 x 20 W CW tones

Block Diagram



DC/AISG blocking on all ports

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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%

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

Ingress Protection Test Method IEC 60529:2001, IP67

Packaging and Weights

Mounting Hardware Weight $0.2 \text{ kg} \mid 0.441 \text{ lb}$ Weight, without mounting hardware $1.9 \text{ kg} \mid 4.189 \text{ lb}$

