

Ultra Compact Twin Diplexer 700-800/900, 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
- New 4.3-10 connectors for improved PIM performance and size reduction
- Twin configuration

Product Classification

Product Type Diplexer

General Specifications

Product Family CBC789

Color Gray

Common Port Label PORT 3 COMMON

Modularity 2-Twin

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
 60 mm | 2.362 in

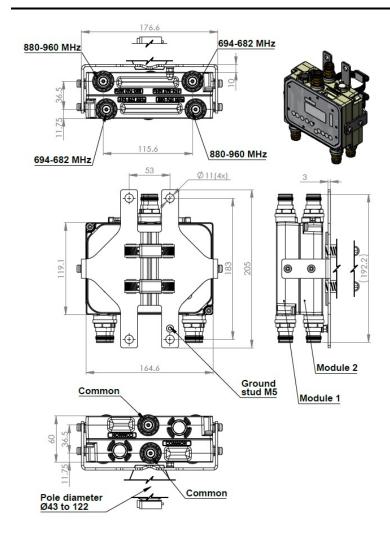
 Width
 165 mm | 6.496 in

 Depth
 120 mm | 4.724 in

Mounting Pipe Diameter Range 40–160 mm

Outline Drawing





Electrical Specifications

Impedance 50 ohm

License Band, Band PassAPT 700 | CEL 900 | EDD 800 | LMR 800

Electrical Specifications, dc Power/Alarm

dc/AISG Pass-through Method No dc/AISG pass-through

dc/AISG Pass-through, combiner dc/AISG blocking on all ports

dc/AISG Pass-through, demultiplexer dc/AISG blocking on all ports

Lightning Surge Current 5 kA

Lightning Surge Current Waveform 8/20 waveform

Electrical Specifications

COMMSCOPE®

Sub-module	1 2	1 2
Branch	1	2
Port Designation	PORT 1 694-862	PORT 2 880-960

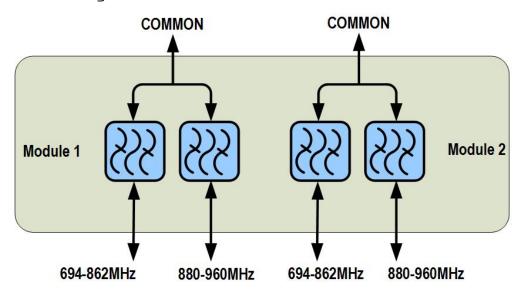
License Band APT 700, Band Pass CEL 900, Band Pass

EDD 800, Band Pass LMR 800, Band Pass

Electrical Specifications, Band Pass

Frequency Range, MHz	694-862	880-960
Insertion Loss, typical, dB	0.2	0.2
Return Loss, typical, dB	22	22
Isolation, typical, dB	40	40
Input Power, PEP, maximum, W	1200	1200
3rd Order PIM, typical, dBc	-161	-161
3rd Order PIM Test Method	Two +43 dBm carriers	Two +43 dBm carriers

Block Diagram



DC BLOCKING ALL PORTS

Environmental Specifications

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

Corrosion Test Method IEC 60068-2-11, 30 days
Ingress Protection Test Method IEC 60529:2001, IP67

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Packaging and Weights

Included Mounting hardware

Volume 1.2 L

Weight, without mounting hardware 2 kg | 4.409 lb

Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

