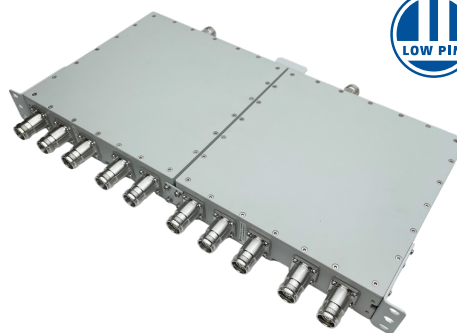




The **MCC300** filter modules support a wide range of multiband configurations and are IP67 rated for reliable operation. Low-band ports operate down to 617 MHz, AWS ports support AWS-1 and AWS-3, and the optional 5G NR n77 port covers C-Band, 3.45 GHz, CBRS, and future n77 applications.

Designed for flexible Neutral Host deployments (MIMO or SISO), the platform features a low-loss, passively cooled design compatible with standard 19" racks. The modules support both wall- and rack-mount configurations, with up to two modules in a 1RU setup. Front-facing radio inputs provide easy access, while rear interfaces connect to wideband hybrid combiners such as the **CM-680E-1R**, **CM-680E-2R** or **CM-141E-1R**.



Specification	MCC300-502	MCC300-503
Card Type	Pentaplexer	Pentaplexer
Frequency (MHz)	600-850: 617-894 PCS: 1850-2000 AWS: 1695-1780 & 2110-2200 WCS-BRS: 2305-2700 5G NR n77: 3300-4200	600-700: 617-798 850: 817-894 PCS: 1850-2000 AWS: 1695-1780 & 2110-2200 5G NR n77: 3300-4200
Insertion Loss	0.40 dB max. (all bands), 0.45 dB max. (PCS, AWS)	0.55 dB max. (all bands), 0.40 dB max. (5G NR n77)
Isolation	>40 dB	
Return Loss	>20 dB	
Group Delay (ns)	600-850: 3, PCS: 18, AWS: 18, WCS-BRS: 9, n77: 7	600-700: 33, 850: 46, PCS: 22, AWS: 23, n77: 6
Impedance	50Ω	
PIM	<-161 dBc (-118 dBm), (Test with 2x +43dBm tones)	
Power/Input*	100 W, avg	
Weight, lb (kg)	8.0 (3.6)	7.7 (3.5)
Connector	4.3-10 (f)	
Environment	-25°C to +65°C, IP67	
Dimensions	8.62 x 8.81 x 1.73 inches [219.0 x 223.8 x 44.0 mm]	
Housing Finish	Aluminum Powder Coated, RAL 7035 Light Gray	

*When connecting to the CM-141E, CM-680E-1R, or CM-680E-2R, keep the total output power below 300W per port.

Brackets and Accessories (sold separately)

Part Number	URL	Description
MCC300-BKT-WP	🔗	Mounting kit for wall or pole installations of MCC300 filter modules.
MCC300-BKT-TW	🔗	Bracket kit for stacking two MCC300 modules in a twin configuration (2-sector SISO or 2x2 MIMO).
MCC300-BKT-RM	🔗	Rack mount side brackets kit for installing modules in a 1RU configuration (2-sector SISO or 2x2 MIMO).
MCC300-BKT-XRM	🔗	Extended L-bracket kit to center a single MCC300 module in 1RU (1-sector SISO).
MCC300-BKT-XRM-4F	🔗	Extended L-bracket kit with (1) integrated 4.3-10 (f-f) bulkhead for through-card applications.
CM-680E-1R	🔗	Single Hybrid Combiner 3x3 617-5925MHz 3x300W -161dBc 4.3-10 IP67, 1RU Rackmount
CM-680E-2R	🔗	Twin Hybrid Combiner 3x3 617-5925MHz 3x300W -161dBc 4.3-10 IP67, 1RU Rackmount
CM-141E-1R	🔗	Single Hybrid Combiner 4x4 617-5925 MHz 4x300W -161dBc 4.3-10 IP67, 1RU Rackmount
MCCJ-ME-ME-19	🔗	Jumper, 4.3-10 Male to 4.3-10 Male, 1/4", TFT-401LF; PIM Tested, 19 inches. (Vertical Mounting.)
MCCJ-ME-ME-15	🔗	Jumper, 4.3-10 Male to 4.3-10 Male, 1/4", TFT-401LF; PIM Tested, 15 inches (Horizontal Mounting)
MCC300-VER-WM04	🔗	4RU vented vertical wall-mount rack
MCC300-SHF-WM04	🔗	4RU 2-post wall-mount shelf rack
TA-2MHE	🔗	Resistive Termination DC-6GHz 2W 4.3-10(m) IP67 (for terminating unused ports)

Note: Specifications are subject to change without prior notification.

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Specification	MCC300-504 (In Development)			MCC300-505 (In Development)		
Card Type	Pentaplexer			Pentaplexer		
Frequency (MHz)	600-850: 617-894 PCS: 1850-2000 AWS: 1695-1780 & 2110-2200 DoD (3.45GHz): 3450-3550 C-Band: 3700-4200			600-700: 617-798 850: 817-894 PCS-AWS: 1695-2200 WCS-BRS: 2305-2360 & 2496-2690 5GNR n77: 3300-4200		
Insertion Loss	600-850: 617-894 PCS: 1850-2000 AWS: 1695-1780 & 2110-2200 DoD (3.45GHz): 3450-3550 C-Band: 3700-4200	< 0.4 dB < 0.5 dB < 0.45 dB < 0.5 dB < 0.4 dB		600-700: 617-798 850: 817-894 PCS-AWS: 1695-2200 WCS-BRS: 2305-2360 & 2496-2690 5GNR n77: 3300-4200	< 0.6 dB < 0.55 dB < 0.6 dB < 0.6 dB < 0.4 dB	
Isolation	>40 dB					
Return Loss	>20 dB					
Impedance	50Ω					
PIM	<-161 dBc (-118 dBm), (Test with 2x +43dBm tones)					
Power/Input	100 W, avg					
Weight, lb (kg)	≤ TBD (TBD)			≤ TBD (TBD)		
Connector	4.3-10 (f)					
Environment	-25°C to +65°C					
IP Rating	IP67					
Dimensions	8.62 x 8.81 x 1.73 inches [219.0 x 223.8 x 44.0 mm]					

Specification	MCC300-401 (In Development)			MCC300-601 (In Development)		
Card Type	Quadraplexer			Hexaplexer		
Frequency (MHz)	600-850: PCS-AWS: WCS-BRS: 5GNR n77:	617-894 1695-2200 2305-2360 & 2496-2690 3300-4200		600-700: 850: PCS: AWS: WCS-BRS: 5GNR n77:	617-798 817-894 1850-2000 1695-1780 & 2110-2200 2305-2360 & 2496-2690 3300-4200	
Insertion Loss	600-850: PCS-AWS: WCS-BRS: 5GNR n77:	617-894 1695-2200 2305-2360 & 2496-2690 3300-4200	< 0.4 dB < 0.4 dB < 0.4 dB < 0.4 dB	600-700: 850: PCS: AWS: WCS-BRS: 5GNR n77:	617-798 817-894 1850-2000 1695-1780 & 2110-2200 2305-2360 & 2496-2690 3300-4200	< 0.6 dB < 0.55 dB < 0.65 dB < 0.65 dB < 0.6 dB < 0.4 dB
Isolation	>40 dB					
Return Loss	>20 dB					
Impedance	50Ω					
PIM	<-161 dBc (-118 dBm), (Test with 2x +43dBm tones)					
Power/Input	100 W, avg					
Weight, lb (kg)	≤ TBD (TBD)			≤ TBD (TBD)		
Connector	4.3-10 (f)					
Environment	-25°C to +65°C					
IP Rating	IP67					
Dimensions	8.62 x 8.81 x 1.73 inches [219.0 x 223.8 x 44.0 mm]					

Note: Specifications are subject to change without prior notification.

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Specification	MCC300-602 (In Development)				
Card Type	Hexaplexer				
Frequency (MHz)	600-700: 617-798 850: 817-894 PCS: 1850-2000 AWS: 1695-1780 & 2110-2200 DoD (3.45GHz): 3450-3550 C-Band: 3700-4200				
Insertion Loss	600-700: 617-798 850: 817-894 PCS: 1850-2000 AWS: 1695-1780 & 2110-2200 DoD (3.45GHz): 3450-3550 C-Band: 3700-4200	< 0.55 dB < 0.55 dB < 0.6 dB < 0.6 dB < 0.6 dB < 0.45 dB			
Isolation	>40 dB				
Return Loss	>20 dB				
Impedance	50Ω				
PIM	<-161 dBc (-118 dBm), (Test with 2x +43dBm tones)				
Power/Input	100 W, avg				
Weight, lb (kg)	≤ TBD (TBD)			≤ TBD (TBD)	
Connector	4.3-10 (f)				
Environment	-25°C to +65°C				
IP Rating	IP67				
Dimensions	8.62 x 8.81 x 1.73 inches [219.0 x 223.8 x 44.0 mm]				

Note: Specifications are subject to change without prior notification.

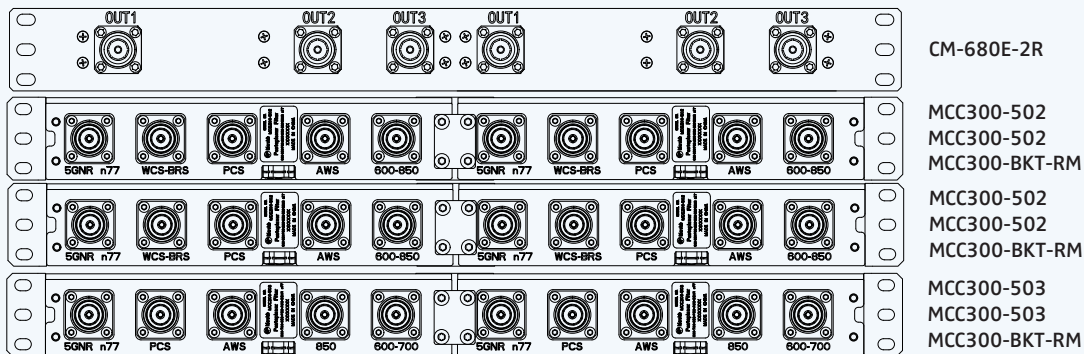
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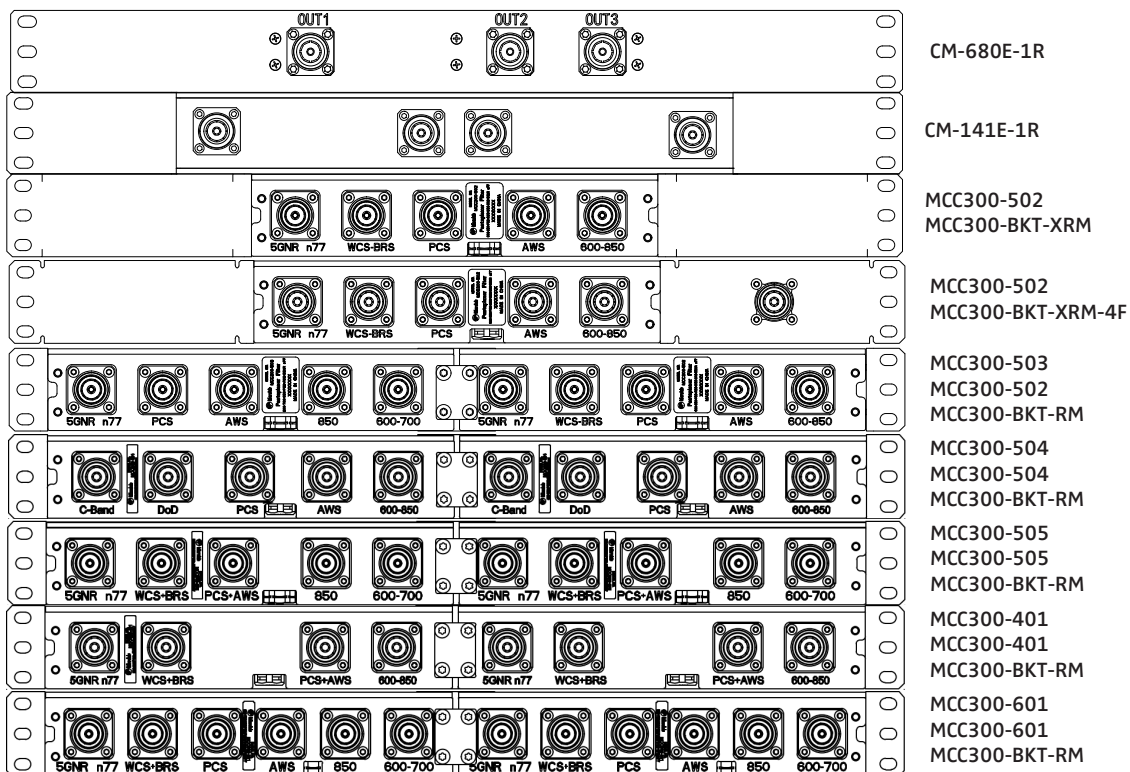
19" Rack mount Configurations

The MCC allows many configurations to support neutralhost MIMO or SISO applications. This agile design can solve a variety of requirements with expansion capability for future integration.

Sample 3 WSP 2x2 MIMO Configuration (4RU)



Expansion Options

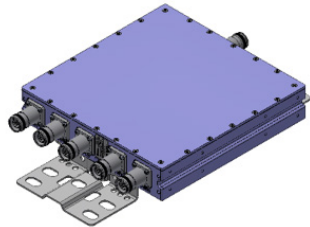
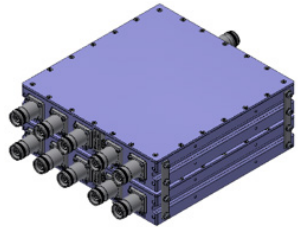
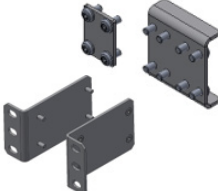
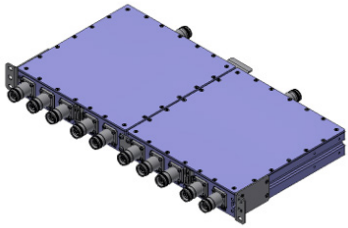
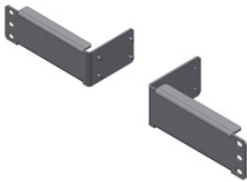
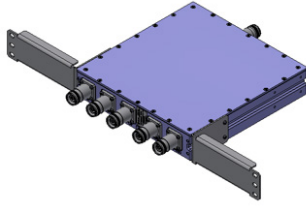
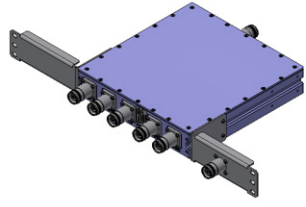


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Mount Brackets Kits for MCC300 Series

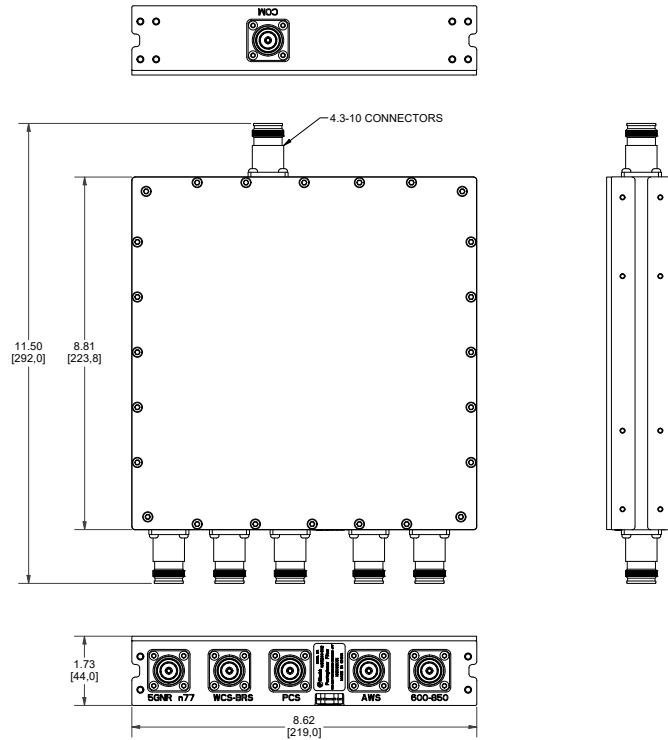
Part Number	Description	Installation
MCC300-BKT-WP 	Mounting kit for wall or pole installations of MCC300 filter modules.	
MCC300-BKT-TW 	Bracket kit for stacking two MCC300 modules in a twin configuration (2-sector SISO or 2x2 MIMO).	
MCC300-BKT-RM 	Rack mount side brackets kit for installing modules in a 1RU rack configuration (2-sector SISO or 2x2 MIMO).	
MCC300-BKT-XRM 	Extended L-bracket kit to center a single MCC300 module in 1RU (1-sector SISO configuration).	
MCC300-BKT-XRM-4F 	Extended L-bracket kit with (1) integrated 4.3-10 (f-f) bulkhead for through-card applications.	

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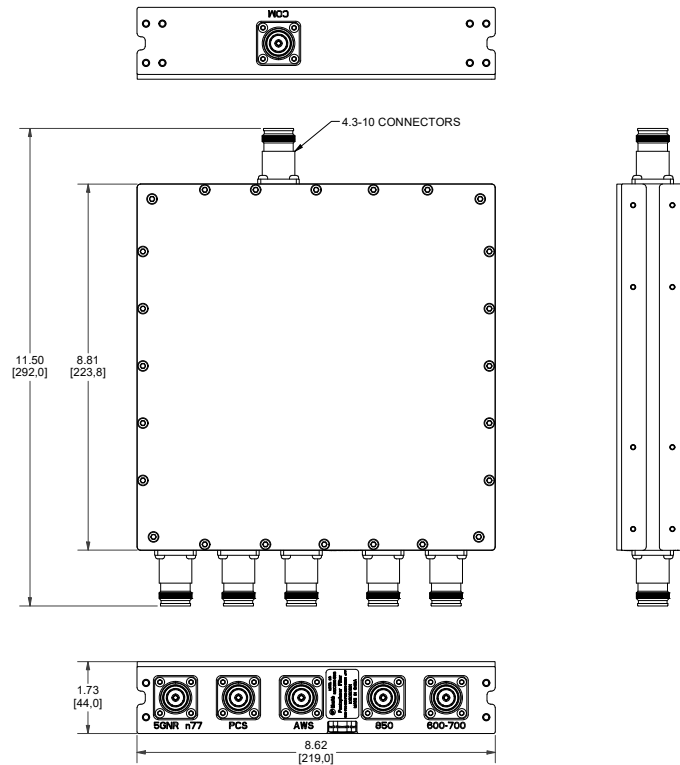
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MCC300-502 Outline



MCC300-503 Outline

Dimensions in inches [mm]

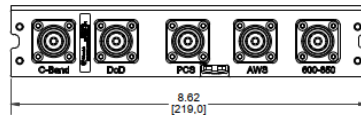
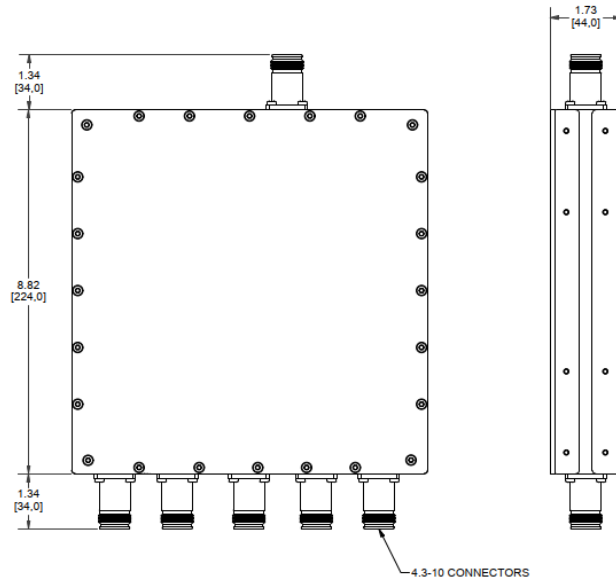


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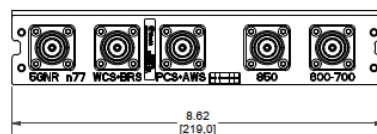
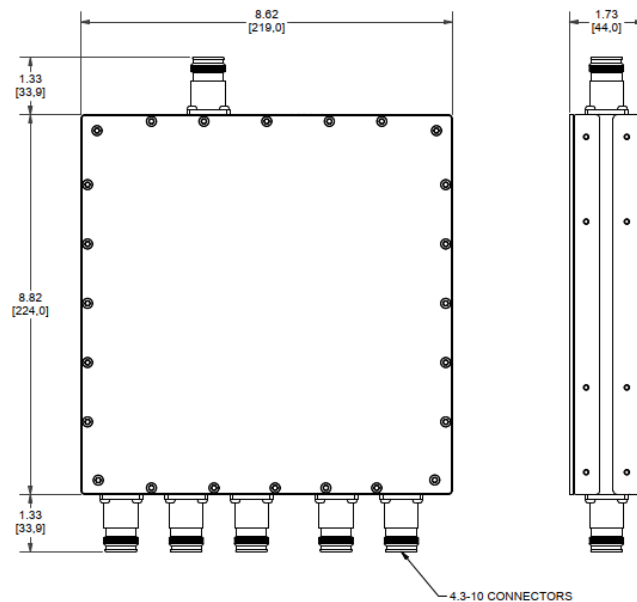
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MCC300-504 Outline



MCC300-505 Outline

Dimensions in inches [mm]

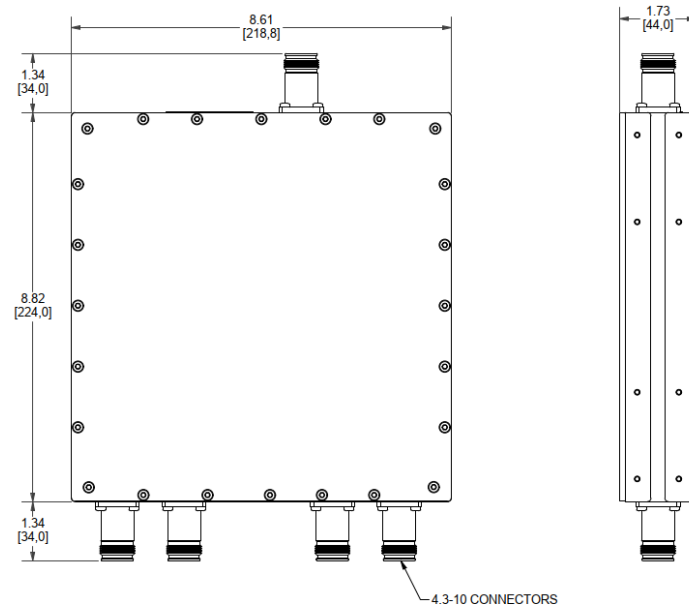


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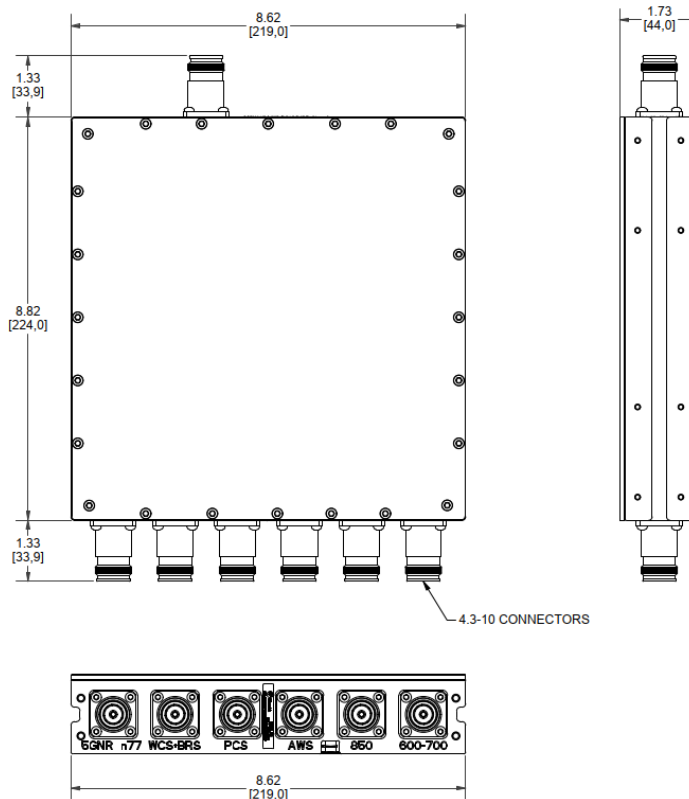
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MCC300-401 Outline



MCC300-601 Outline

Dimensions in inches [mm]



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