



MI-202nn

Diplexer 1800-2100/2600



*This picture is showing MI-2021

The MI-202nn family of cavity diplexer products include:

- **MI-202nA**, diplexer with DC/AISG Auto-Sense
- **MI-202n1**, all ports DC grounded
- **MI-202n2**, diplexer with DC/AISG on Common – High & Low Band
- **MI-202n3**, diplexer with DC/AISG on Common - High Band, Low port DC grounded
- **MI-202n4**, diplexer with DC/AISG on Common - Low Band, High port DC grounded

MASS™

Microdata Advanced Site Solutions

With our expertise in site system design we are able to provide a solution for any site sharing or upgrade scenario.

Our focus area is RF-filter based solutions including combiners, multi band TMAs, di-, tri- and quadruplexers.

Our product portfolio supports all frequencies for mobile communication bands ranging from 450 MHz to 6 GHz.

Site and network sharing makes it cost efficient to reach sparsely populated areas where new subscribers can contribute to revenue.

MASS™

Advantage

Increases coverage

more traffic & higher ARPU

Increases capacity

more traffic & higher ARPU

Reduces the cost

of network expansion

Minimizes

site acquisition issues

Specifications

Low band				
Frequency Band	1695 - 2180MHz			
Insertion Loss	< 0.2 dB			
Return Loss	> 18 dB			
Rejection High Band	50 dB			
Continuous Average Power	400 W			
Intermodulation, 2x43 dBm TX Carrier	-117 dBm			
High Band				
Frequency Band	2496 - 2690 MHz			
Insertion Loss	< 0.2 dB			
Return Loss	> 18 dB			
Rejection Low Band	50 dB			
Continuous Average Power	250 W			
Intermodulation, 2x43 dBm TX Carrier	-117 dBm			
Environmental				
Operating Temperature Range	-40 to +65°C -40 to +149°F			
Operation	ETS 300 019-1-4 Class 4.1E			
Storage	ETS 300 019-1-1 Class 1.2			
Ingress Protection	IP67			
Electrical		With Auto-Sense		
DC By Pass	3 A	2 A, drop max 2.4 V		
AISG pass	Yes			
AISG RL		>12 dB		
AISG Loss		< 1dB		
Lightning Protection		10 kA 8/20 µs		
Input Voltage Power		8-31 V max 0.3 W		
Mechanical		Single Mount	With Auto-Sense	Dual Mount
Dimensions (WxHxD)		126x110x52 mm	126x110x63 mm	126x110x102 mm
		4.96x4.33x2.05 in	4.96x4.33x2.48 in	4.96x4.33x4.02 in
Volume		0.7 l	0.9 l	1.3 l
Weight		1.65 kg	1.75 kg	2.9 kg
(Including connectors and bracket)		3.64 lb	3.86 lb	6.39 lb
Connectors		See Selection Guide		
Mounting		Hose clamps or wall mount (Supporter Pole Diameter: 40-140mm)		
Colour		NCS 1502-R		
Bracket		Included		
Shipping Information			Dual Mount	
Carton Size		250x210x200 mm		
		9.84x8.27x7.87 in		
Carton Qty/Pallet		75		

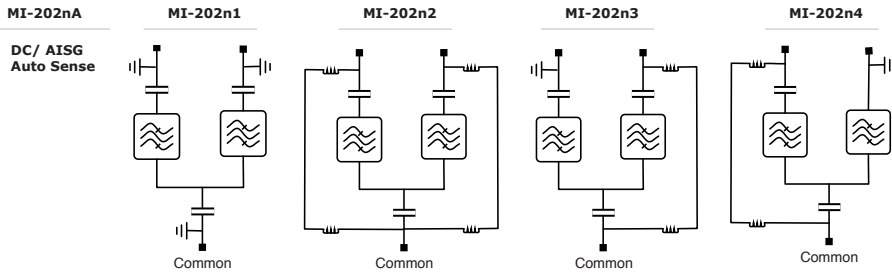
Selection Guide

		Connector (F)	
		7/16	4.3-10
Mount	Single	MI-2020n	MI-2023n
	Dual	MI-2021n	MI-2024n

*All single unit filters e.g. MI-2020n are available in a dual filter configuration i.e. MI-2021n.

*The dual filter configuration is mounted on a single bracket for hose clamp or wall mount.

Block Diagram

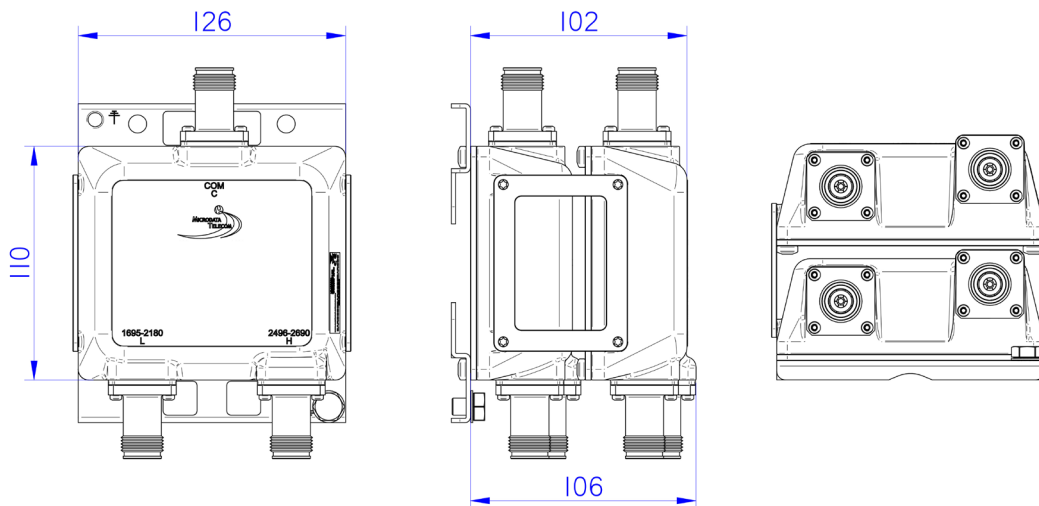


DC/AISG

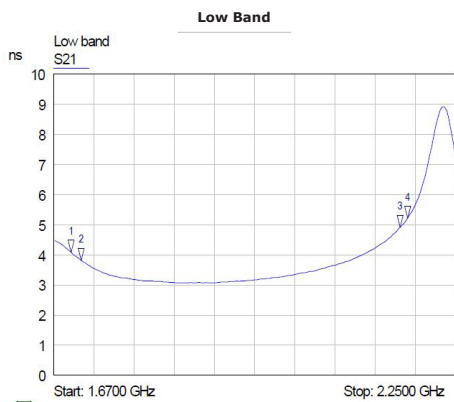
	1800-2100	2600
MI-202nA	Auto-Sense	
MI-202n1	Block	Block
MI-202n2	Pass	Pass
MI-202n3	Block	Pass
MI-202n4	Pass	Block

Mechanical Drawing

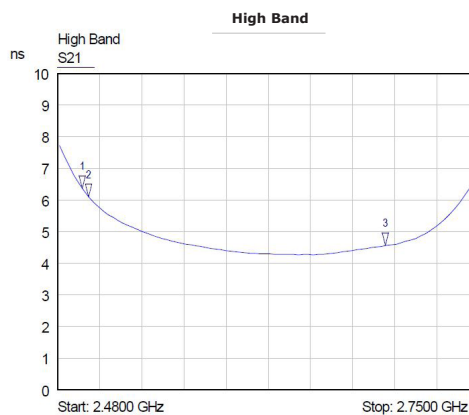
*This picture is showing MI-2024n



Group Delay



Mkr	Trace	X-Axis	Value	Notes
1	∇ S21	1.6950 GHz	4.09 ns	
2	∇ S21	1.7100 GHz	3.82 ns	
3	∇ S21	2.1700 GHz	4.91 ns	
4	∇ S21	2.1810 GHz	5.22 ns	



Mkr	Trace	X-Axis	Value	Notes
1	∇ S21	2.4960 GHz	6.36 ns	
2	∇ S21	2.5000 GHz	6.09 ns	
3	∇ S21	2.6900 GHz	4.56 ns	