



# MI-231nn

## Quadruplexer

### 800/900/1800-2100/2600

## 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

Port 1 (800) - Common		
Frequency Band	790 - 862 MHz	
Insertion Loss	0.2 dB *, 0.4 dB max	
Return Loss, normal modes, all ports	> 18 dB	
Rejection 880 - 2690 MHz	> 50 dB (>30 dB 900 RX)	
Continuous Average Power	250 W	
Intermod. (IM3), 2x43 dBm TX Carrier	-116 dBm	
Port 2 (900) - Common		
Frequency Band	880 - 960 MHz	
Insertion Loss	0.2 dB *, 0.4 dB max	
Return Loss	> 18 dB	
Rejection 790 - 862 MHz	> 50 dB TX >30 dB RX	
Rejection 1710 - 2690 MHz	50 dB	
Continuous Average Power	250 W	
Intermod. (IM3), 2x43 dBm TX Carrier	-116 dBm	
Port 3 (1800-2100) - Common		
Frequency Band	1710 - 2170 MHz	
Insertion Loss, 1710 - 2170 MHz	0.2 dB *, 0.4 dB max	
Return Loss	> 18 dB	
Rejection 790 - 960 MHz & 2500 - 2690 MHz	50 dB	
Continuous Average Power	250 W	
Intermod. (IM3), 2x43 dBm TX Carrier	-116 dBm	
Port 4 (2600) - Common		
Frequency Band	2500 - 2690 MHz	
Insertion Loss, 2500 - 2690 MHz	< 0.3 dB	
Return Loss	> 18 dB	
Rejection 790 - 2170 MHz	50 dB	
Continuous Average Power	250 W	
Intermod. (IM3), 2x43 dBm TX Carrier	-116 dBm	
Environmental		
Operating Temperature Range	-40° to +65°C   -40 to +149°F	
Environmental	ETS 300 019	
Ingress Protection	IP68	
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   Dual Mount
Dimensions (WxHxD)	264x160x57.5 mm 10.39x6.30x2.26 in	264x160x118.5 mm 10.39x6.30x4.67 in
With Auto-Sense	To be added	
Volume	2.4 l	5.0 l
Weight gross	4.8 kg   10.58 lb	9.6 kg   21.16 lb
Connectors	See Selection Guide	
Mounting(Supporter Pole Diameter: 40-140mm)	Hose clamps or wall mount	
Colour	NCS 1502-R (light grey)	
Bracket	Included	
Shipping Information		Single Mount   Dual Mount
Carton Size**	340x326x165 mm 13.39x12.83x6.49 in	355x325x225 mm 13.98x12.80x8.86 in
Carton Qty/Pallet	To be added	To be added
*Typical		
**The Carton Size of different models may vary, please contact us for detailed information		

## Selection Guide

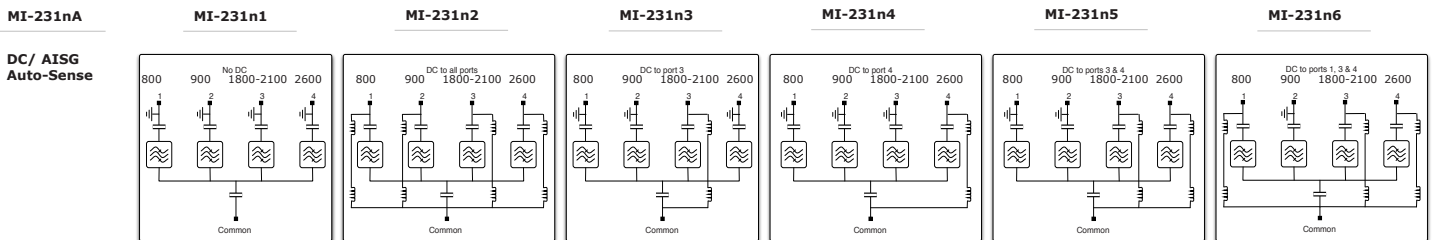
		Connector (F)	
		7/16	4.3-10
Mount	Single	MI-2310n	MI-2313n
	Dual	MI-2311n	MI-2314n

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

## DC/AISG

	800	900	1800-2100	2600
MI-231nA	Auto-Sense			
MI-231n1	Block	Block	Block	Block
MI-231n2	Pass	Pass	Pass	Pass
MI-231n3	Block	Block	Pass	Block
MI-231n4	Block	Block	Block	Pass
MI-231n5	Block	Block	Pass	Pass
MI-231n6	Pass	Block	Pass	Pass

## Block Diagram



## Mechanical Drawing

\*This picture is showing MI-2310n

\*This picture is showing MI-2311n

