



MI-538nn Diplexer AWS/PCS



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

AWS		
Frequency Band	1695 - 1780 MHz, 2110 - 2200 MHz	
Insertion Loss	< 0.2 dB typ < 0.3 dB max	
Return Loss	> 20 dB	
Rejection PCS	> 50 dB	
Continuous Average Power	100 W	
Intermodulation, 2x43 dBm TX Carrier	min 160 dBc (-117 dBm)	
PCS		
Frequency Band	1850 - 1990 MHz	
Insertion Loss	< 0.25 dB typ < 0.38 dB max	
Return Loss	> 20 dB	
Rejection AWS	> 50 dB	
Continuous Average Power	100 W	
Intermodulation, 2x43 dBm TX Carrier	min 160 dBc (-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 2.4V
AISG pass	Yes	
AISG RL		> 12 dB
AISG Loss		< 1 dB
Lightning Protection	+/-5 kA 8/20 µs	+/-5 kA 8/20 µs
Input Voltage Power		8-31 V Max 0.3W
Mechanical		
	Single Mount	Dual Mount
Dimensions (WxHxD) excl connectors	140x135x50 mm	140x135x107 mm
	5.5x5.3x1.9 in	5.5x5.3x4.2 in
Volume	0.9 l	2.1 l
Weight	<2.0 kg	To be added
	<4.4 lb	
Connectors	See selection guide	
Mounting	Hose clamps or wall mount	
	(Supporter Pole Diameter: 40-140mm)	
Color	NCS 1502-R	
Bracket	Included	

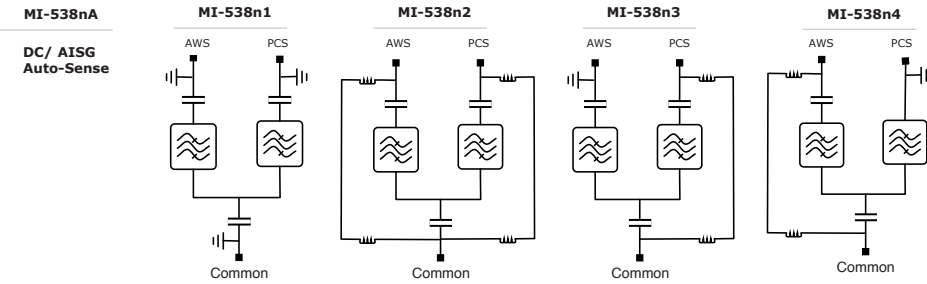
Selection Guide

		Connector (F)	
		7/16	4.3-10
Mount	Single	MI-5380n	MI-5383n
	Dual	MI-5381n	MI-5384n

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

Block Diagram

DC/AISG



	AWS	PCS
MI-538nA	Auto-Sense	
MI-538n1	Block	Block
MI-538n2	Pass	Pass
MI-538n3	Block	Pass
MI-538n4	Pass	Block

Mechanical Drawing

*This picture is showing MI-5380n

