

## The MI-550nn family of cavity diplexer products, include:

Diplexer 700-900/L-band

- MI-550n1, all ports DC grounded

MI-550nn

- MI-550n2, diplexer with DC/AISG on Common High & Low Band
- MI-550n3, diplexer with DC/AISG on Common High Band, Low port DC grounded
- MI-550n4, diplexer with DC/AISG on Common Low Band, High port DC grounded
- MI-550nA, auto-sense

## **Specifications**

•		
Low band		
Frequency Band	698 - 960 MHz	
Insertion Loss	< 0.2 dB *	
Return Loss	> 18 dB	
Rejection High Band	50 dB	
Continuous Average Power / Peak Power	250 W / 2000 W	
Intermodulation, 2x43 dBm TX Carrier	-117 dBm (160 dBc)	
High Band		
Frequency Band	1427 - 1517 MHz	
Insertion Loss	< 0.25 dB *	
Return Loss	> 18 dB	
Rejection Low Band	50 dB	
Continuous Average Power / Peak Power	250 W / 2000 W	
Environmental		
Operating Temperature Range	-40 to +65°C   -40 to +14	ŀ9°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		8-30 V Max 0.3W
Mechanical	Single Band	Dual Band
Dimensions (WxHxD)	99x143x52.5 mm 3.90x5.63x2.07 in	TBD
With Auto-Sense	TBD	
Volume	0.7 l	
With Auto-Sense	TBD	
Weight (including brackets)	TBD	
Connectors	See Selection Guide for specifi	cation
Mounting	Hose clamps or wall mount (Su	upporter Pole Diameter: 40-140mm)
Colour	NCS 1502-R	
Bracket	Included	
* Typical		
- Values in specification are subject to change without notice		

### **Selection Guide**

		Connector (F)	
		7/16	4.3-10
Mount	Single	MI-5500n	MI-5503n
	Dual	MI-5501n	MI-5504n

Auto-Sense: MI-550nA

### **MASS**<sup>TM</sup>

#### **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**<sup>TM</sup> **Advantage**

#### **Increases coverage**

more traffic & higher ARPU

#### **Increases capacity**

more traffic & higher ARPU

#### **Reduces the cost**

of network expansion

#### **Minimizes**

site acquisition issues

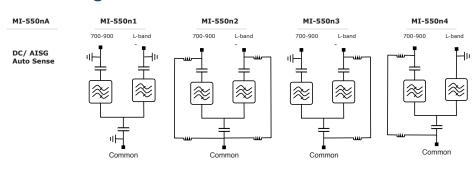
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<sup>\*</sup>The dual filter configuration is mounted on a single bracket for hose clamp or wall mount.



# MI-550nn Diplexer 700-900/L-band

## **Block Diagram**

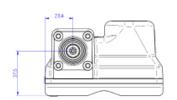


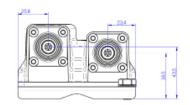
### DC/AISG

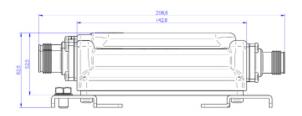
	700-900	L-band
MI-550nA	Auto-Sense	
MI-550n1	Block	Block
MI-550n2	Pass	Pass
MI-550n3	Block	Pass
MI-550n4	Pass	Block

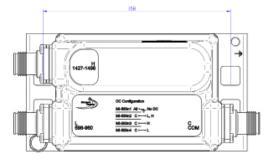
# **Mechanical Drawing**

This picture is showing MI-5503n









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