



Electrical	Specification	Comments
<b>Passive Intermodulation, 3rd Order<sup>1</sup></b>	-160 dBc minimum, dynamic HALT	As per IEC 62037-2, -3, before, during and after HALT testing
<b>Operating frequency</b>	DC - 6 GHz	
<b>Minimum Return Loss (VSWR)<sup>1</sup></b>	< -28 dB (1.08) 617 - 960 MHz < -28 dB (1.08) 1700 - 2200 MHz < -25 dB (1.12) 2200 - 2700 MHz < -20 dB (1.22) 3400 - 4200 MHz <sup>2</sup> < -20 dB (1.22) 5150 - 5925 MHz <sup>2</sup>	As per Anatel 75

<sup>1</sup> 100% of jumpers factory-tested with result available via web-based portal (link below)

<sup>2</sup> Jumpers manufactured with 6 GHz-ready connectors will be factory-tested to 6 GHz.



# 1/2" Factory Fit and Certified Jumpers

Interface	3 GHz	6 GHz
2M		X
4M		X
4E		X
4P	X	
4R	X	
4F	X	
DM	X	
DR	X	
DF	X	
MM	X	
MR	X	
NM	X	
NR	X	
NF	X	

3 GHz				
	Return Loss (dB) <sup>3</sup>			
Frequency (MHz)	L<20	20< L<80	80< L<130	130< L<170
617 - 960	-31	-26	-25	-24
1700 - 2200	-28	-26	-25	-23
2200 - 2700	-27	-24	-22	-20
3400 - 4200				
5150 - 5925				

6 GHz				
	Return Loss (dB) <sup>3</sup>			
Frequency (MHz)	L<20	20< L<80	80< L<130	130< L<170
617 - 960	-31	-26	-25	-24
1700 - 2200	-28	-26	-25	-23
2200 - 2700	-27	-24	-22	-20
3400 - 4200	-24	-20	-18	-16
5150 - 5925	-21	-20	-18	-16

<sup>3</sup> For mixed interface jumpers, Return Loss specification is governed by the interface with the lowest frequency rating.



# 1/2" Factory Fit and Certified Jumpers

Highly Accelerated Life Tests (HALT)	Specification	Comments
<b>Mechanical stress, dynamic</b>	Meets electrical performance in above table before, during, and after test.	As per IEC 62037-2, -3
<b>Peak pull strength</b>	> 200 lb min, 1/2" superflexible jumpers > 350 lb min, 1/2" annular jumpers	Cable limited, cable must fail before connection
<b>Cable torque</b>	> 36 lbf-in min, 1/2" superflexible jumpers > 60 lbf-in min, 1/2" annular jumpers	Cable limited, cable must fail before connection
<b>Thermal shock</b>	Meets electrical performance in above table before and after test.	As per Anatel 75, before, during, and after HALT testing
<b>Thermal stress</b>	Meets electrical performance in above table before, during, and after test.	-55 °C to +85 °C, cycled every 2 hours for 30 days minimum
<b>Moisture migration</b>	Meets electrical performance in above table before, during, and after test. No dye present past seals at 10X magnification.	ANSI/SCTE 60 5 day submersion with thermal cycling.
<b>Corrosion resistance</b>	Corrosion must not penetrate plating into base metals; plating must stay adhered to base metal.	ASTM B117-94, 1000 hour duration
<b>UV exposure</b>	Materials must show no signs of discoloration or embrittlement after 12 months exposure, equal to 33.4 years outdoors.	Full UV spectrum (UVA, UVB, UVC), 12 months exposure with moisture present per ASTM G155
<b>Vibration</b>	Meets electrical performance in above table before, during, and after test	

Jumper part number and description samples		
<b>L4MW4MW-12-8</b>	Jumper, 4.3-10 to 4.3-10, 1/2" Annular, WPS, 8 ft	
<b>L4M4M-12-25</b>	Jumper, 4.3-10 to 4.3-10, 1/2" Annular, 25 ft	
Customer Support		
<a href="#">Jumper performance portal</a>		
<a href="#">Request connector training</a>		
<b>Customer service</b>	1-315-431-7100	customerservice@jmawireless.com

All specifications are subject to change without notice.