



**Break the gigabit barrier without  
breaking ground.**

***Dual Pole Radio Mount (DPRM)***  
***&***  
***Pole Split Radio Mount (PSRM)***



**DragonWave**

[www.dragonwaveinc.com](http://www.dragonwaveinc.com)

## **DPRM**

The DPRM is used to mount two AirPair or Horizon radios/units to the same antenna. Using a DPRM, both radios can transmit simultaneously, providing a doubling of traffic throughput or alternatively, a redundancy option. The DPRM allows two radios to be mounted face to face, directing radio frequency energy from both radios to a single antenna. One radio is oriented for vertical polarization, and the other for horizontal polarization. It is recommended that different frequency channels be used for each unit.

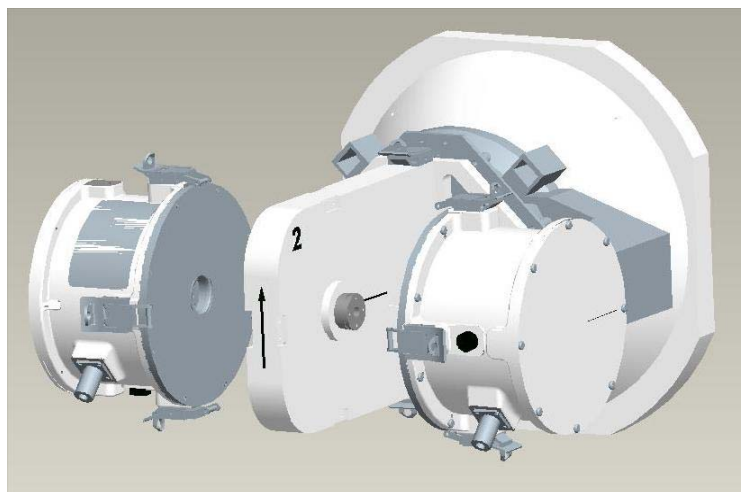
Parameter	Performance Specification
DPRM Dimensions	7.5 in wide x 7.5 in high x 12 in depth
Weight	9 lbs
Wind Loading	Survival wind load of 125 mph: 45 lbf <sup>1</sup>
Supported Configurations	2+0
Insertion Loss (Vertical Port)	.25 dB maximum <sup>2</sup>
Insertion Loss (Horizontal Port)	.75 dB maximum <sup>3</sup>
Connector – Vertical Port	Radio Port
Connector – Horizontal Port	Radio Port
Connector – Antenna Port	Antenna Port
Channel Use	Adjacent or separated Cross-Polarized Channels
Frequency Support	L6,U6,7,8,11,13,15,18,23,24DEMS,26,28,38 GHz <sup>4</sup>

<sup>1</sup>This should be added to the Fs for the Antenna (note: this does not get added to the Fa antenna force as the DPRM is shielded by the antenna).

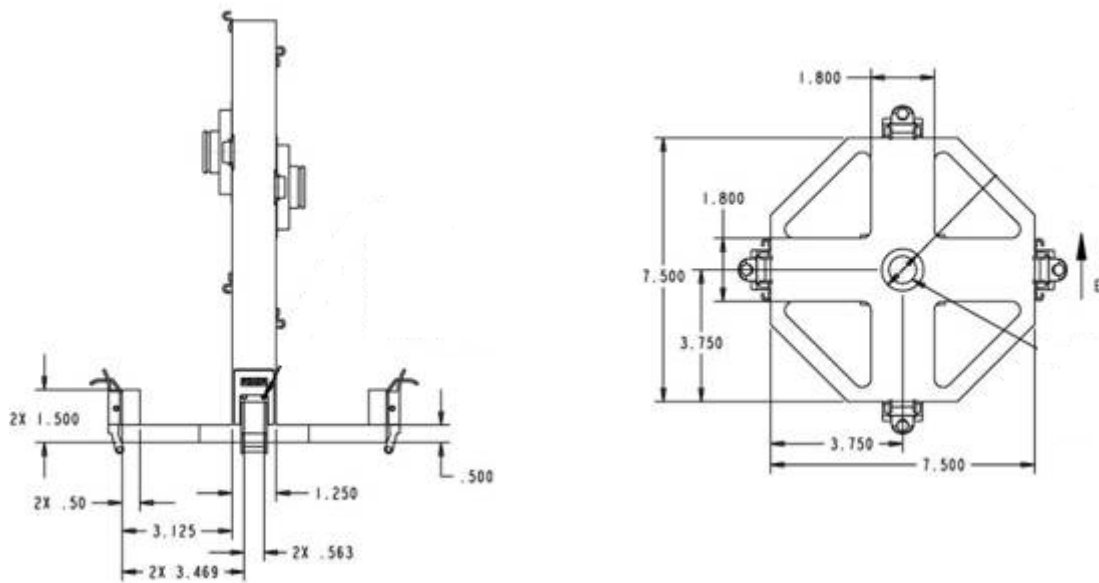
<sup>2</sup>In Pathloss 4.0, this is accounted for in miscellaneous coupler loss of 0.25dB per end for Vertical port.  
28 & 38GHz have slightly higher losses: 28 GHz = 0.35dB, 38 = 0.50dB

<sup>3</sup>In Pathloss 4.0, this is accounted for in miscellaneous coupler loss of 0.75dB per end for Horizontal port.  
28 & 38GHz have slightly higher losses: 28 GHz = 1.0dB, 38 = 1.2dB

<sup>4</sup>Does not support 24 GHz UL.



**Figure 1 – DPRM with AirPair (ODU's)**



**Figure 2 – DPRM Mechanical drawing**



**Figure 3 – DPRM Final Assembly  
Horizon Compact (left), AirPair (right)**

## PSRM

The PSRM is used to mount two AirPair or Horizon radios/units to the same antenna. Using a PSRM, a customer can provide hardware redundancy on a link by providing a primary (active) and secondary paths. The PSRM allows two radios to be mounted face to face, directing radio frequency energy from both radios through a single antenna. Both radios will be connected with the same polarization and configured with the same channel frequency so that in the event of a hardware failure and or failover on the active link, the secondary radio will simply take over.

Parameter	Performance Specification
PSRM Dimensions	7.5 in wide x 7.5 in high x 12 in depth
Weight	9 lbs
Wind Loading	Survival wind load of 125 mph: 45 lbf <sup>1</sup>
Supported Configurations	1+1
Insertion Loss (Primary Port)	1.9 dB maximum <sup>2</sup> <i>Primary to primary = 3.8dB total link loss, Primary to secondary = 8.4dB total link loss</i>
Insertion Loss (Secondary Port)	6.5 dB maximum <sup>3</sup> <i>Secondary to secondary = 13.0dB total link loss, Primary to secondary = 8.4dB total link loss</i>
Connector – Primary Port	Radio Port
Connector – Secondary Port	Radio Port
Connector – Antenna Port	Antenna Port
Channel Use	Reuse the same channel
Frequency Support	11,13,15,18,23,24DEMS,26,28,38 GHz <sup>4</sup>

<sup>1</sup>This should be added to the Fs for the Antenna (note: this does not get added to the Fa antenna force as the DPRM is shielded by the antenna).

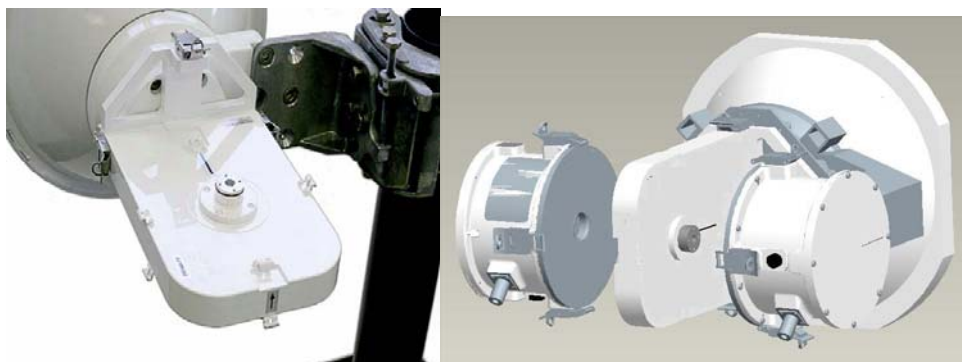
<sup>2</sup>In Pathloss 4.0, this is accounted for in miscellaneous coupler loss.

28 & 38GHz have slightly higher losses: 28 GHz = 2.0dB, 38 = 2.0dB

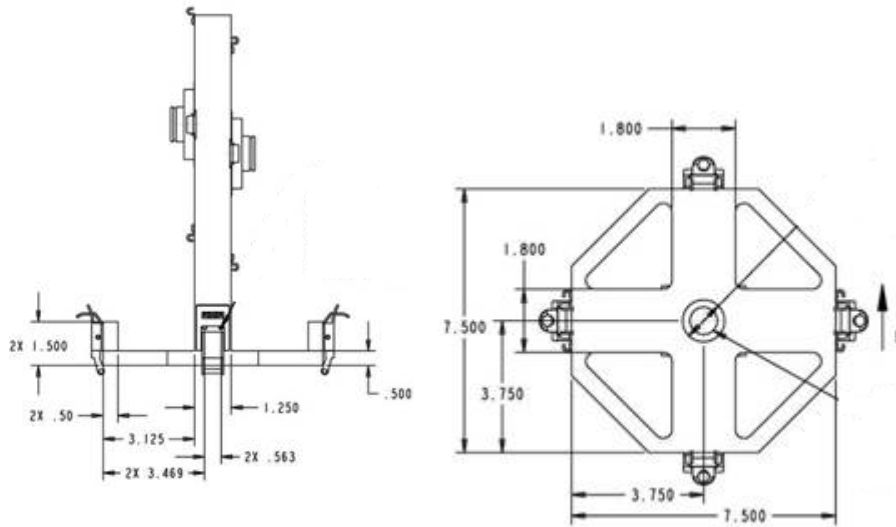
<sup>3</sup>In Pathloss 4.0, this is accounted for in miscellaneous coupler loss.

28 & 38GHz have slightly higher losses: 28 GHz = 7.5dB, 38 = 8.5dB

<sup>4</sup>Does not support 24 GHz UL.



**Figure 1 – PSRM with AirPair (ODU's)**



**Figure 2 – PSRM Mechanical drawing**



**Figure 3 – PSRM Final Assembly  
Horizon Compact (left), AirPair (right)**