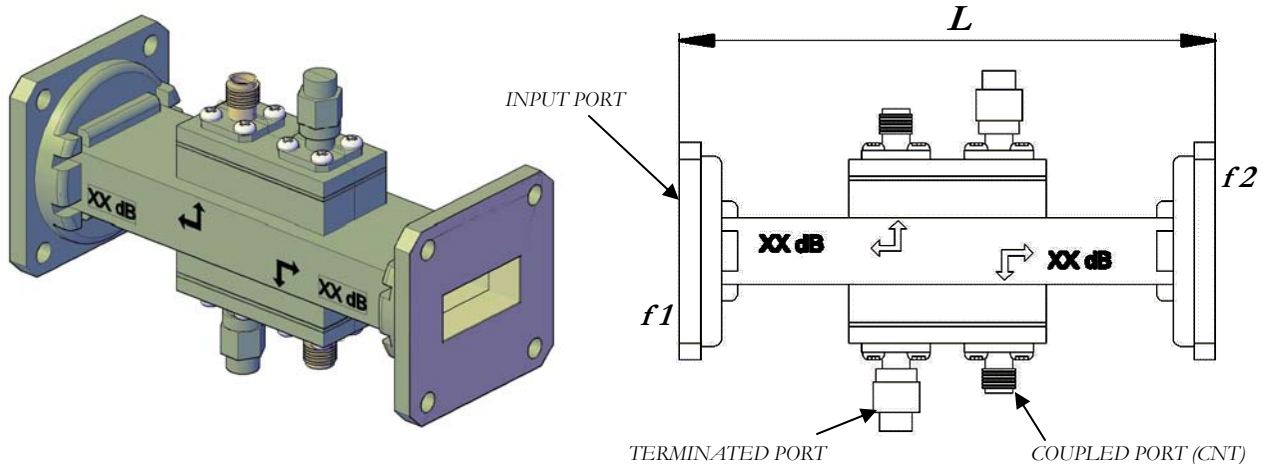


Rectangular Waveguide Dual Loop Couplers



Model	WR #	Frequency (GHz)	Length (L)
WLD62-	62	12.40 - 18.00	4.00
WLD75-	75	10.00 - 15.00	4.00
WLD90-	90	8.20 - 12.40	4.00
WLD102-	102	7.00 - 11.00	4.00
WLD112-	112	7.05 - 10.00	4.00
WLD137-	137	5.85 - 8.20	4.50

Model	WR #	Frequency (GHz)	Length (L)
WLD159-	159	4.90 - 7.05	4.50
WLD187-	187	3.95 - 5.85	5.00
WLD229-	229	3.30 - 4.90	5.00
WLD284-	284	2.60 - 3.95	5.00
WLD340-	340	2.20 - 3.30	5.00
WLD430-	430	1.70 - 2.60	5.00

Space Machine custom fabricates a standard product line of dual loop couplers covering waveguide sizes WR62 thru WR430. These loop couplers are ideally suited for 25% bandwidths with coupling variation of $\pm 0.5\text{dB}$. Over the full waveguide band, coupling variation is $\pm 2.5\text{dB}$. Directivity is 18dB minimum. Main arm VSWR is 1.08:1 and secondary arm VSWR is 1.3:1.

Ordering Information:

Dual Loop Coupler, WR90, Bronze, 30dB and 50db Coupling, SMA Female Coupled Ports, Cover / Cover Flanges, Chromated, Paint Space Machine Gray.

Example part number:

WLD **wr** **-m** **c1** **c2** **cnt** **-f1 f2** **-p** **f**
WLD 90 -B 30 50 SF -01 01 -C P

Series (WLD):

Waveguide Size (wr): WR62 thru WR430

Material (-m): A – Aluminum, B – Bronze, O – Other

Coupling (c1, c2): 30 - 60 dB

Connector Type (cnt): See [Appendix E](#)

Flange (-f1 f2): See [Appendix G](#)

Plating (-p): C – Chromate, S – Silver, G – Gold, O – Other, N – None

Finish (f): P – Paint Space Machine Gray, N – None, O – Other