

# Double Ridge Couplers

## Series WRD\*\*\*131

New High Directivity Ultra Flat Double Ridge Couplers 2 to 40 GHz available:

- **New Industry Standard for Directivity [ $>40\text{dB}$ ]**
- **Ultra Flat Coupling Response**
- **Excellent VSWR**
- **Precision Machined and Manufactured**
- **All Sizes and Coupling Values Available**
- **Models up to 40GHz**
- **Competitively Priced**



Flann has developed a new range of double ridge multihole coupler for standard double ridge waveguide sizes and tailored to any special bandwidth requirements.

Full field analysis has been combined with modern theory to provide fast accurate optimisation.

Our unique design of the coupler array combined with precision machining practice provides better than 40dB directivity full band with typical directivities better than 45dB achieved.

Flann is now able to provide a service to make any standard or non-standard type of coupler within the constraints of commercial viability.

We are now able to offer the industry's only 40dB directivity coupler with a full band coupling flatness of less than  $\pm 1\text{dB}$ .

All double ridge couplers are available in coupling values of 10 – 50dB.

Model	Frequency Range GHz	Waveguide Size	Minimum Directivity dB	Coupling Sensitivity $\pm$ dB	Primary Arm VSWR Max	Secondary VSWR Via Coax Connector Max	Model
WRD200131	2.0 - 4.8	WRD200D24	40	0.8	1.1	1.35	WRD200131
WRD350131	3.5 - 8.2	WRD350D24	40	0.8	1.1	1.35	WRD350131
WRD475131	4.75 - 11.0	WRD475D24	40	0.8	1.1	1.35	WRD475131
WRD580131	5.8 - 16.0	WRD580D28	40	0.8	1.1	1.35	WRD580131
WRD650131	6.5 - 18.0	WRD650D28	40	0.8	1.1	1.35	WRD650131
WRD750131	7.5 - 18.0	WRD750D24	40	0.8	1.1	1.35	WRD750131
WRD110131	11.0 - 26.5	WRD110C24	35	0.8	1.1	1.35	WRD110131
WRD180131	18.0 - 40.0	WRD180C24	35	0.8	1.1	1.35	WRD180131

- **Improved directivity models available on request**
- **Improved Secondary VSWR achieved on request; typically 1.25**
- **Improved Coupling Flatness available on request**

#### ORDERING INFORMATION

Model: Coupling value suffix; description  
 Example Model WRD650131-10 Double ridge multihole coupler, 10dB coupling, 40dB directivity

Please contact our sales office for more details.