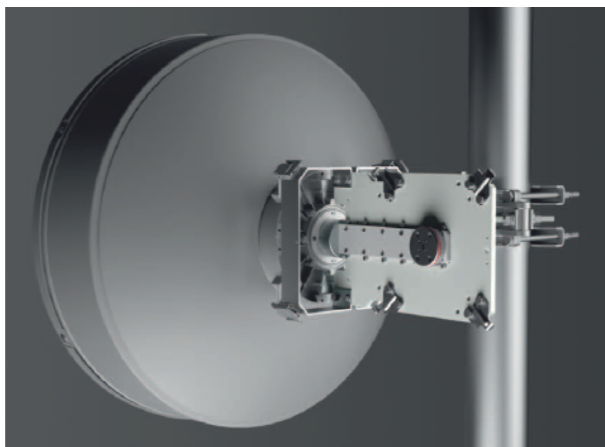


Hybrid Couplers for Outdoor Radio Units



Faini's Hybrid Coupler



Faini's Hybrid Coupler - integrated installation

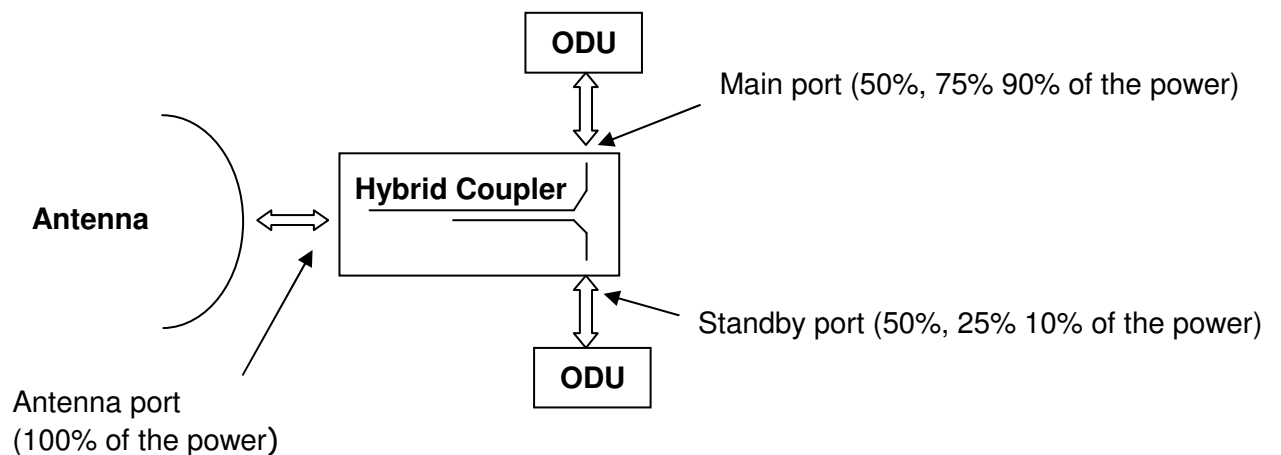
A complete family of **hybrid couplers** are available in the frequency ranges from **4 GHz** up to **42 GHz**, with different coupling coefficients and customized interfaces. Faini's couplers are very easy to be installed, allow a good clearance for the installation and maintenance of the radio equipments and are suitable for both **integrated and separated installation**.

Available coupling coefficients are **3dB** (symmetrical), **6dB** (Asymmetrical 25%), **10dB** (Asymmetrical 10%), or any other upon request.

Available ODU's interfaces are for Siae, Intracom, Remec, Youncta, NSN, or any other upon request.

Electrical characteristics in the available frequency ranges are listed in the table below. Different frequency ranges and wide band solutions are also available upon request.

Please contact info@fainitelecommunication.com for further details.



Hybrid Coupler characteristics															
Frequency range (GHz)		4.4 - 5 (**)	5.925 – 7.125	7.125 – 8.5	10 – 11.7	12.7- 13.25	14.2- 15.35	17.7-19.7	21.2-23.6	24.5-26.5	24.5-29.5	27.5-29.5	31.8-33.4	37.0 – 40.0	40.5-43.5
<i>Symmetrical -3</i>	Insertion Loss, Main (dB)	N.A.	3.9	3.9	3.9	3.5	3.5	3.5	3.5	3.8	3.9	3.8	3.8	3.8	3.9
	Insertion Loss, Standby (dB)	N.A.	3.9	3.9	3.9	3.5	3.5	3.5	3.5	3.8	3.9	3.8	3.8	3.8	3.9
<i>Asymmetrical -6</i>	Insertion Loss, Main (dB)	1.7	1.9	1.9	1.9	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.9
	Insertion Loss, Standby (dB)	7.0	7.3	7.3	7.3	7.0	7.0	7.0	7.0	7.2	7.2	7.2	7.2	7.2	7.3
<i>Asymmetrical -10</i>	Insertion Loss, Main (dB)	1.0	1.2	1.2	1.2	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.3
	Insertion Loss, Standby (dB)	10.9	11.0	11.0	11.0	10.8	10.8	10.8	10.8	11.0	11.0	11.0	11.0	11.0	11.2
R.L. @ coupler ports (dB)		-17.7	-17.7	-17.7	-17.7	-20.8	-20.8	-20.8	-20.8	-20.8	-17.7	-20.8	-20.8	-20.8	-20.8
VSWR @ coupler port (dB)		1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.2	1.3	1.2	1.2	1.2	1.2
Inter port Isolation (dB)		24	21	21	21	21	21	21	21	21	21	21	21	21	21
wave guide (*)		(**)	R70	R84	R100	R120	R140	R220	R220	R220	R260	R320	R320	R320	R400
(*) Other waveguides are available upon request (**) SMA-F interface															

Ordering Information

The Hybrid Couplers ordering codes are defined as follow:

HC *cc* - *fff* - *Int*

where:

- HC**: identifies the Hybrid Coupler product line
- cc*: defines the coupling ratio
- fff*: defines the frequency range
- Int*: defines the ODU interface

<i>fff</i>	frequency range ^(*) (GHz)		<i>cc</i>	Nominal coupling ratio ^(*) (dB)
044	4.4-5.0		03	-3
059	5.925 – 7.125		06	-6
071	7.125 – 8.5		10	-10
100	10.0 – 11.7			
127	12.7 – 13.25			
142	14.2 – 15.35			
177	17.7 – 19.7			
212	21.2 – 23.6			
245	24.5 – 26.5			
2628	24.5 - 29.5			
275	27.5 – 28.5			
318	31.8 – 33.4			
370	37.0 – 40.0			
405	40.5 – 43.5			
(*) different frequency ranges and coupling ratios could be available upon request				