

Directional Couplers (Waveguide and Coaxial)

FEATURES:

- ❖ Rugged construction
- ❖ High directivity
- ❖ Low insertion loss
- ❖ 0.5-110 GHz

APPLICATIONS:

- ❖ Test equipment
- ❖ Subsystems
- ❖ Power sampling



DESCRIPTION:

CDC Series

Cernex CDC Series multi-hole directional couplers are offered for the frequency range of 0.5 to 110 GHz in seven waveguide bands. The standard coupling levels are 3, 6, 10, 30 and 40 dB with full waveguide operational bandwidth. The high directivity is achieved via low VSWR built-in termination. The couplers are typically used for power sampling or frequency monitoring with minimum signal loss on the main transmitting path. The multi-hole couplers are especially used in the test setups where power reflection measurement is required.

SPECIFICATIONS:

COAXIAL:

Model Number	Frequency Range (MHz)	Insertion Loss (dB) Max.	Coupling (dB)	Directivity (dB)	Power Avg (W) Max.	VSWR Max.	Connector Type	Case Type (mm)
CDCU3U80620H	350-800	1.8	6±0.6	20	100	1.3:1	N-F	184 X 50 X 30
CDCU3U81020H	350-800	0.8	10±0.6	20	100	1.3:1	N-F	184 X 50 X 30
CDCU3U81520H	350-800	0.5	15±1.0	20	100	1.3:1	N-F	184 X 50 X 30
CDCL5010622Y	500-1000	0.3	6±1.0	22	-	1.20:1	SMA-F	86 X 22 X 10
CDCL5011022Y	500-1000	0.3	10±1.25	22	-	1.20:1	SMA-F	86 X 22 X 10
CDCL5011522Y	500-1000	0.3	15±1.25	22	-	1.20:1	SMA-F	86 X 22 X 10
CDCL5012022Y	500-1000	0.3	20±1.25	22	-	1.20:1	SMA-F	86 X 22 X 10
CDCL5013022Y	500-1000	0.3	30±1.25	22	-	1.20:1	SMA-F	86 X 22 X 10
CDCL5020620Y	500-2000	0.4	6±1.0	20	-	1.25:1	SMA-F	99 X 22 X 10
CDCL5021020Y	500-2000	0.4	10±1.0	20	-	1.25:1	SMA-F	99 X 22 X 10
CDCL5021520Y	500-2000	0.4	15±1.0	20	-	1.25:1	SMA-F	99 X 22 X 10
CDCL5022020Y	500-2000	0.4	20±1.0	20	-	1.25:1	SMA-F	99 X 22 X 10
CDCL5023020Y	500-2000	0.4	30±1.0	20	-	1.25:1	SMA-F	99 X 22 X 10
CDCU5021020T1	500-2000	0.5	10±1.0	20	60	1.25:1	N-F	170 X 30 X 20
CDCU5022020T1	500-2000	0.4	20±1.0	20	60	1.25:1	N-F	170 X 30 X 20
CDCU5023020T1	500-2000	0.4	30±1.0	20	60	1.25:1	N-F	170 X 30 X 20
CDCU5020620T	500-2000	0.5	6±1.0	20	50	1.2:1	SMA-F	133 X 15 X 11
CDCU5021020T	500-2000	0.5	10±1.0	20	50	1.2:1	SMA-F	133 X 15 X 11
CDCU5022020T	500-2000	0.4	20±1.0	20	50	1.2:1	SMA-F	133 X 15 X 11
CDCU5023020T	500-2000	0.4	30±1.0	20	50	1.2:1	SMA-F	133 X 15 X 11



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Model Number	Frequency Range (MHz)	Insertion Loss (dB) Max.	Coupling (dB)	Directivity (dB)	Power Avg (W) Max.	VSWR Max.	Connector Type	Case Type (mm)
CDCU5081015K	500-8000	1.3	10±1.0	15	20	1.35:1	SMA-F	133 X 18 X 13
CDCU5081615K	500-8000	0.85	16±1.0	15	20	1.35:1	SMA-F	133 X 18 X 13
CDCU5082015K	500-8000	0.8	20±1.0	15	20	1.35:1	SMA-F	133 X 18 X 13
CDCU5181010T	500-18000	1.6	10±1.0	10	50	1.6:1	SMA-F	113 X 15 X 11
CDCU5182010T	500-18000	1.6	20±1.0	10	50	1.6:1	SMA-F	113 X 15 X 11
CDCU5183010T	500-18000	1.6	30±1.0	12	50	1.6:1	SMA-F	113 X 15 X 11
CDCU5181012K	500-18500	1.5	10±1.0	12	20	1.35:1	SMA-F	111 X 18.5 X 13
CDCU5181612K	500-18500	1.1	16±1.0	12	20	1.35:1	SMA-F	111 X 18.5 X 13
CDCU5201015K	500-20000	1.65	10±1.0	15	20	1.35:1	SMA-F	114 x 18 x 13
CDCU5201315K	500-20000	1.4	13±1.0	15	20	1.35:1	SMA-F	114 x 18 x 13
CDCU5261313K	500-26500	1.5	13±1.0	13	20	1.45:1	SMA-F	111 X 18.5 X 9.6
CDCU8020620T	800-2500	0.5	6±1.0	20	50	1.2:1	SMA-F	85 X 15 X 11
CDCU8021020T	800-2500	0.5	10±1.0	20	50	1.2:1	SMA-F	85 X 15 X 11
CDCU8022020T	800-2500	0.4	20±1.0	20	50	1.2:1	SMA-F	85 X 15 X 11
CDCU8023020T	800-2500	0.4	30±1.0	20	50	1.2:1	SMA-F	85 X 15 X 11
CDCU8020520T	800-2500	0.5	5±0.5	20	60	1.25:1	N-F	105 X 30 X 21
CDCU8020620T1	800-2500	0.5	6±0.5	20	60	1.25:1	N-F	105 X 30 X 21
CDCU8020720T	800-2500	0.5	7±0.5	20	60	1.25:1	N-F	105 X 30 X 21
CDCU8021020T1	800-2500	0.5	10±0.8	20	60	1.25:1	N-F	105 X 30 X 21
CDCU8021500T	800-2500	0.5	15±1.0	20	60	1.25:1	N-F	105 X 30 X 21
CDCU8022020T1	800-2500	0.4	20±1.0	20	60	1.25:1	N-F	105 X 30 X 21
CDCU8023020T1	800-2500	0.4	30±1.0	20	60	1.25:1	N-F	105 X 30 X 21
CDCU8020520T1	800-2500	0.4	5±0.5	20	200	1.25:1	N-F	120.3 X 40.3 X 16
CDCU8020620T2	800-2500	0.4	6±0.5	20	200	1.25:1	N-F	120.3 X 40.3 X 16
CDCU8020720T2	800-2500	0.4	7±0.5	20	200	1.25:1	N-F	120.3 X 40.3 X 16
CDCU8021020T2	800-2500	0.4	10±0.8	20	200	1.25:1	N-F	120.3 X 40.3 X 16
CDCU8021500T2	800-2500	0.3	15±1.0	20	200	1.25:1	N-F	120.3 X 40.3 X 16
CDCU8022020T2	800-2500	0.3	20±1.0	20	200	1.25:1	N-F	120.3 X 40.3 X 16
CDCU8023020T2	800-2500	0.3	30±1.0	20	200	1.25:1	N-F	120.3 X 40.3 X 16
CDCU8020522B	800-2500	0.15	5±0.6	22	60	1.2:1	SMA-F	168 x 74 x 32.5
CDCU8020522B1	800-2500	0.15	5±0.6	22	60	1.2:1	N-F	156 x 58 x 16.5
CDCU8020520H	800-2500	2.0	5±0.5	20	100	1.2:1	N-F	120 X 27 X 17
CDCU8020620H	800-2500	1.55	6±0.5	20	100	1.2:1	N-F	120 X 27 X 17
CDCU8020720H	800-2500	1.35	7±0.5	20	100	1.2:1	N-F	120 X 27 X 17
CDCU8021520H	800-2500	0.5	15±0.5	20	100	1.2:1	N-F	120 X 27 X 17
CDCU8022020H	800-2500	0.4	20±0.4	20	100	1.2:1	N-F	120 X 27 X 17
CDCU8021022B	800-2500	0.15	10±0.8	22	60	1.2:1	N-F	156 x 58 x 16.5
CDCU8021022B1	800-2500	0.15	10±0.8	22	60	1.2:1	SMA-F	168 x 74 x 32.5



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CDCU8021020H	800-2500	0.8	10±0.6	20	100	1.2:1	N-F	*
CDCU8021522B	800-2500	0.15	15±0.8	22	60	1.2:1	N-F	156 x 58 x 16.5
CDCU8021522B1	800-2500	0.15	15±0.8	22	60	1.2:1	SMA-F	168 x 74 x 32.5
CDCU8022022B	800-2500	0.15	20±1.0	22	60	1.2:1	N-F	156 x 58 x 16.5
CDCU8022022B1	800-2500	0.15	20±1.0	22	60	1.2:1	SMA-F	168 x 74 x 32.5
CDCU8023022B	800-2500	0.15	30±1.0	22	60	1.2:1	N-F	156 x 58 x 16.5
CDCU8023022B1	800-2500	0.15	30±1.0	22	60	1.2:1	SMA-F	168 x 74 x 32.5
CDCU8024022B	800-2500	0.15	40±1.0	22	60	1.2:1	N-F	156 x 58 x 16.5
CDCU8024022B1	800-2500	0.15	40±1.0	22	60	1.2:1	SMA-F	168 x 74 x 32.5
CDCU8025022B	800-2500	0.15	50±1.0	22	60	1.2:1	N-F	156 x 58 x 16.5
CDCU8025022B1	800-2500	0.15	50±1.0	22	60	1.2:1	SMA-F	168 x 74 x 32.5
CDCU8030717H	800-3500	1.60	7±0.8	17	100	1.27:1	N-F	100 X 30 X 20
CDCU8031017H	800-3500	1.05	10±1.2	17	100	1.27:1	N-F	100 X 30 X 20
CDCU8031517H	800-3500	0.7	15±1.2	17	100	1.27:1	N-F	100 X 30 X 20
CDCU8030520T	800-3500	0.4	5±0.5	20	200	1.25:1	N-F	126 X 38 X 20
CDCU8030620T	800-3500	0.4	6±0.5	20	200	1.25:1	N-F	126 X 38 X 20
CDCU8030720T	800-3500	0.4	7±0.5	20	200	1.25:1	N-F	126 X 38 X 20
CDCU8031020T	800-3500	0.4	10±0.5	20	200	1.25:1	N-F	126 X 38 X 20
CDCU8031520T	800-3500	0.4	15±0.5	20	200	1.25:1	N-F	126 X 38 X 20
CDCU8032020T	800-3500	0.3	20±1.0	20	200	1.25:1	N-F	126 X 38 X 20
CDCU8033020T	800-3500	0.3	30±1.0	20	200	1.25:1	N-F	126 X 38 X 20
CDCU8060614H	800-6000	2.25	6±1.5	14	100	1.35:1	SMA-F	100 x 30 x 20
CDCU8061014H	800-6000	1.45	10±2.0	14	100	1.35:1	SMA-F	100 x 30 x 20
CDCU8061514H	800-6000	1.30	15±2.0	14	100	1.35:1	SMA-F	100 x 30 x 20
CDC01020620Y	1000-2000	0.3	6±1.0	20	-	1.20:1	SMA-F	53 X 22 X 10
CDC01021020Y	1000-2000	0.3	10±1.25	20	-	1.20:1	SMA-F	53 X 22 X 10
CDC01021520Y	1000-2000	0.3	15±1.25	20	-	1.20:1	SMA-F	53 X 22 X 10
CDC01022020Y	1000-2000	0.3	20±1.25	20	-	1.20:1	SMA-F	53 X 22 X 10
CDC01023020Y	1000-2000	0.3	30±1.25	20	-	1.20:1	SMA-F	53 X 22 X 10
CDC01040620Y	1000-4000	0.45	6±1.0	20	-	1.25:1	SMA-F	86 X 22 X 10
CDC01041020Y	1000-4000	0.45	10±1.0	20	-	1.25:1	SMA-F	86 X 22 X 10
CDC01041520Y	1000-4000	0.45	15±1.0	20	-	1.25:1	SMA-F	86 X 22 X 10
CDC01042020Y	1000-4000	0.45	20±1.0	20	-	1.25:1	SMA-F	86 X 22 X 10
CDC01043020Y	1000-4000	0.45	30±1.0	20	-	1.25:1	SMA-F	86 X 22 X 10
CDC01040620T	1000-4000	0.5	6±1.0	20	50	1.2:1	SMA-F	73 x 15x 11
CDC01041020T	1000-4000	0.5	10±1.0	20	50	1.2:1	SMA-F	73 x 15x 11
CDC01042020T	1000-4000	0.4	20±1.0	20	50	1.2:1	SMA-F	73 x 15x 11
CDC01043020T	1000-4000	0.4	30±1.0	20	50	1.2:1	SMA-F	73 x 15x 11



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Model Number	Frequency Range (MHz)	Insertion Loss (dB) Max.	Coupling (dB)	Directivity (dB)	Power Avg (W) Max.	VSWR Max.	Connector Type	Case Type (mm)
CDC01121015K	1000-12400	1.10	10±0.5	15	20	1.35:1	SMA-F	7.62X18.54X13.4
CDC01181012T	1000-18000	1.2	10±1.0	12	50	1.6:1	SMA-F	73 x 15x 11
CDC01182012T	1000-18000	1.2	20±1.0	12	50	1.6:1	SMA-F	73 x 15x 11
CDC01183012T	1000-18000	1.2	30±1.0	12	50	1.6:1	SMA-F	73 x 15x 11
CDC01181016K	1000-18000	1.3	10±1.0	16	20	1.35:1	SMA-F	88 x 18.5 x 13
CDC01181616K	1000-18000	0.9	16±1.0	16	20	1.35:1	SMA-F	88 x 18.5 x 13
CDC01201016K	1000-20000	1.4	10±1.0	16	20	1.35:1	SMA-F	88.9 x 18.5 x 13.4
CDC01201616K	1000-20000	1.1	16±1.0	16	20	1.35:1	SMA-F	88.9 x 18.5 x 13.4
CDC01202016K	1000-20000	1.0	20±1.0	16	20	1.35:1	SMA-F	88.9 x 18.5 x 13.4
CDC01261014K	1000-26500	1.6	10±1.0	14	20	1.4:1	3.5mm-F	73 x 16 x 13
CDC01262014K	1000-26500	1.2	20±1.0	14	20	1.4:1	3.5mm-F	73 x 16 x 13
CDC01401010K	1000-40000	2.0	10±1.0	10	20	1.7:1	2.4mm-F	51 x 16.51 x 10
CDC01401310K	1000-40000	1.8	13±1.0	10	20	1.7:1	2.4mm-F	51 x 16.51 x 10
CDC01020520S	1700-2500	0.4	5±0.5	20	50	1.3:1	N-F	62 x 21 x 28
CDC01020620S	1700-2500	0.4	6±0.5	20	50	1.3:1	N-F	62 x 21 x 28
CDC01020720S	1700-2500	0.4	7±0.5	20	50	1.3:1	N-F	62 x 21 x 28
CDC01021020S	1700-2500	0.4	10±0.5	20	50	1.3:1	N-F	62 x 21 x 29
CDC01021220S	1700-2500	0.4	12±0.7	20	50	1.3:1	N-F	51 x 34 x 18
CDC01021520S	1700-2500	0.4	15±0.7	20	50	1.3:1	N-F	51 x 34 x 18
CDC01022020S	1700-2500	0.4	20±0.7	20	50	1.3:1	N-F	51 x 34 x 18
CDC01022520S	1700-2500	0.4	25±1.0	20	50	1.3:1	N-F	51 x 34 x 18
CDC01023020S	1700-2500	0.4	30±1.0	20	50	1.3:1	N-F	51 x 34 x 18
CDC01023520S	1700-2500	0.4	35±1.0	20	50	1.3:1	N-F	51 x 34 x 18
CDC01024020S	1700-2500	0.4	40±1.0	20	50	1.3:1	N-F	51 x 34 x 18
CDC01261014K1	1700-26500	1.5	10±1.0	14	20	1.45:1	3.5mm-F	61 x 17.5 x 13.4
CDC01261614K1	1700-26500	1.2	16±1.0	14	20	1.45:1	3.5mm-F	61 x 17.5 x 13.4
CDC02040620Y	2000-4000	0.3	6±1.0	20	-	1.25:1	SMA-F	38 X 22 X 10
CDC02041020Y	2000-4000	0.3	10±1.25	20	-	1.25:1	SMA-F	38 X 22 X 10
CDC02041520Y	2000-4000	0.3	15±1.25	20	-	1.25:1	SMA-F	38 X 22 X 10
CDC02042020Y	2000-4000	0.3	20±1.25	20	-	1.25:1	SMA-F	38 X 22 X 10
CDC02043020Y	2000-4000	0.3	30±1.25	20	-	1.25:1	SMA-F	38 X 22 X 10
CDC02080616Y	2000-8000	0.5	6±1.0	16	-	1.35:1	SMA-F	53 X 22 X 10
CDC02081016Y	2000-8000	0.5	10±1.0	16	-	1.35:1	SMA-F	53 X 22 X 10
CDC02081516Y	2000-8000	0.5	15±1.0	16	-	1.35:1	SMA-F	53 X 22 X 10
CDC02082016Y	2000-8000	0.5	20±1.0	16	-	1.35:1	SMA-F	53 X 22 X 10
CDC02083016Y	2000-8000	0.5	30±1.0	16	-	1.35:1	SMA-F	53 X 22 X 10
CDC02080620T	2000-8000	0.5	6±1.0	20	50	1.2:1	SMA-F	43 x 15 x 11
CDC02081020T	2000-8000	0.5	10±1.0	20	50	1.2:1	SMA-F	43 x 15 x 11



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CDC02082020T	2000-8000	0.4	20±1.0	20	50	1.2:1	SMA-F	43 x 15 x 11
CDC02083020T	2000-8000	0.4	30±1.0	20	50	1.2:1	SMA-F	43 x 15 x 11
CDC02080620K	2000-8000	1.60	6±0.5	20	50	1.20:1	SMA-F	45.97X17.02X10.16
CDC02081020K	2000-8000	0.75	10±0.5	20	50	1.20:1	SMA-F	45.97X17.02X10.16
CDC02082020K	2000-8000	0.35	20±1.0	20	50	1.20:1	SMA-F	45.97X17.02X10.16
CDC02081620K	2000-8600	0.50	16±1.0	20	50	1.30:1	SMA-F	54.10X18.54X10.16
CDC02180616K	2000-18000	1.9	6±1.0	16	20	1.30:1	SMA-F	53 x 17.5 x 13
CDC02181016K	2000-18000	1.9	10±1.0	16	20	1.30:1	SMA-F	52.8X17.5X13.5
CDC02181616K	2000-18000	1.9	16±1.0	16	20	1.30:1	SMA-F	52.8X17.5X13.5
CDC02182016K	2000-18000	1.9	20±1.0	16	20	1.30:1	SMA-F	52.8X17.5X13.5
CDC02181012T	2000-18000	0.7	10±1.0	12	50	1.5:1	SMA-F	43 x 15 x 11
CDC02182012T	2000-18000	0.7	20±1.0	12	50	1.5:1	SMA-F	43 x 15 x 11
CDC02183012T	2000-18000	0.7	30±1.0	12	50	1.5:1	SMA-F	43 x 15 x 11
CDC02201016K	2000-20000	1.3	10±1.0	16	20	1.35:1	SMA-F	52.8 x 17.5 x 13
CDC02201616K	2000-20000	1.0	16±1.0	16	20	1.35:1	SMA-F	52.8 x 17.5 x 13
CDC02202016K	2000-20000	0.9	20±1.0	16	20	1.35:1	SMA-F	52.8 x 17.5 x 13
CDC02401311K	2000-40000	1.7	13±1.0	11	20	1.7:1	2.4mm-F	44 x 16.5 x 10
CDC02501010K	2000-50000	2.0	10±1.0	10	20	1.8:1	2.4mm-F	44 x 16.5 x 10
CDC02501310K	2000-50000	1.8	13±1.0	10	20	1.8:1	2.4mm-F	44 x 16.5 x 10
CDC04080618Y	4000-8000	0.4	6±1.0	18	-	1.3:1	SMA-F	33 X 22 X 10
CDC04081018Y	4000-8000	0.4	10±1.25	18	-	1.3:1	SMA-F	33 X 22 X 10
CDC04081518Y	4000-8000	0.4	15±1.25	18	-	1.3:1	SMA-F	33 X 22 X 10
CDC04082018Y	4000-8000	0.4	20±1.25	18	-	1.3:1	SMA-F	33 X 22 X 10
CDC04083018Y	4000-8000	0.4	30±1.25	18	-	1.3:1	SMA-F	33 X 22 X 10
CDC04120614Y	4000-12000	06	6±1.0	14	-	1.4:1	SMA-F	38 X 22 X 10
CDC04121014Y	4000-12000	06	10±1.0	14	-	1.4:1	SMA-F	38 X 22 X 10
CDC04121514Y	4000-12000	06	15±1.0	14	-	1.4:1	SMA-F	38 X 22 X 10
CDC04122014Y	4000-12000	06	20±1.0	14	-	1.4:1	SMA-F	38 X 22 X 10
CDC04123014Y	4000-12000	06	30±1.0	14	-	1.4:1	SMA-F	38 X 22 X 10
CDC04121015K	4000-12400	0.9	10±0.5	15	20	1.35:1	SMA	35.56X16.76X10.16
CDC04122015K	4000-12400	0.5	20±1.0	15	20	1.35:1	SMA	35.56X16.76X10.16
CDC04181012T	4000-18000	0.6	10±1.0	12	50	1.5:1	SMA-F	33 x 15 x 11
CDC04182012T	4000-18000	0.6	20±1.0	12	50	1.5:1	SMA-F	33 x 15 x 11
CDC04183012T	4000-18000	0.6	30±1.0	12	50	1.5:1	SMA-F	33 x 15 x 11
CDC04200615K	4000-20000	1.9	6±1.0	15	20	1.35:1	SMA	35.5 x 16.7 x 10
CDC04201015K	4000-20000	1.0	10±1.0	15	20	1.35:1	SMA-F	35.5 x 16.7 x 10
CDC04202015K	4000-20000	0.6	20±1.0	15	20	1.35:1	SMA-F	35.5 x 16.7 x 10
CDC06181012Y	6000-18000	0.8	10±1.25	12	-	1.5:1	SMA-F	33 X 22 X 10



Directional Couplers (Waveguide and Coaxial)

Model Number	Frequency Range (MHz)	Insertion Loss (dB) Max.	Coupling (dB)	Directivity (dB)	Power Avg (W) Max.	VSWR Max.	Connector Type	Case Type (mm)
CDC06181512Y	6000-18000	0.8	15±1.0	12	-	1.5:1	SMA-F	33 X 22 X 10
CDC06182012Y	6000-18000	0.8	20±1.25	12	-	1.5:1	SMA-F	33 X 22 X 10
CDC06183012Y	6000-18000	0.8	30±1.25	12	-	1.5:1	SMA-F	33 X 22 X 10
CDC06261013K	6000-26500	1.3	10±0.5	13	20	1.4:1	3.5mm-F	28.44X16.25X13.46
CDC06262014K	6000-26500	.80	20±1.0	14	20	1.4:1	3.5mm-F	28.44X16.25X13.46
CDC07121015K	7000-12400	0.90	10±0.5	15	20	1.35:1	SMA-F	35.56X16.76X10.16
CDC07122015K	7000-12400	.50	20±1.0	15	20	1.35:1	SMA-F	35.56X16.76X10.16
CDC08120615Y	8000-12000	0.5	6±1.0	15	-	1.35:1	SMA-F	33 X 22 X 10
CDC08121015Y	8000-12000	0.5	10±1.0	15	-	1.35:1	SMA-F	33 X 22 X 10
CDC08121515Y	8000-12000	0.5	15±1.0	15	-	1.35:1	SMA-F	33 X 22 X 10
CDC08122015Y	8000-12000	0.5	20±1.0	15	-	1.35:1	SMA-F	33 X 22 X 10
CDC08123015Y	8000-12000	0.5	30±1.0	15	-	1.35:1	SMA-F	33 X 22 X 10
CDC10401010K	10000-40000	1.7	10±0.7	10	20	1.7:1	2.4mm-F	28 x 15 x 10
CDC10402010K	10000-40000	1.3	20±1.0	10	20	1.7:1	2.4mm-F	28 x 15 x 10
CDC10461010K	10000-46000	1.9	10±0.7	10	20	1.8:1	2.4mm-F	28 x 15 x 10
CDC10462010K	10000-46000	1.5	20±1.0	10	20	1.8:1	2.4mm-F	28 x 15 x 10
CDC10501010K	10000-50000	1.9	10±0.7	10	20	1.8:1	2.4mm-F	28 x 15 x 10
CDC10502010K	10000-50000	1.5	20±1.0	10	20	1.8:1	2.4mm-F	28 x 15 x 10
CDC12181012Y	12000-18000	0.8	10±1.0	12	-		SMA-F	33 X 22 X 10
CDC12181512Y	12000-18000	0.8	15±1.0	12	-		SMA-F	33 X 22 X 10
CDC12182012Y	12000-18000	0.8	20±1.0	12	-		SMA-F	33 X 22 X 10
CDC12183012Y	12000-18000	0.8	30±1.0	12	-		SMA-F	33 X 22 X 10
CDC12181015K	12400-18000	1.0	10±0.5	15	20	1.35:1	SMA-F	35.56X16.76X10.16
CDC 12182015K	12400-18000	.60	20±1.0	15	20	1.35:1	SMA-F	35.56X16.76X10.16
CDC18261014K	18000-26500	1.3	10±0.5	14	20	1.4:1	3.5mm-F	28.45x16.26x13.4
CDC18262014K	18000-26500	0.8	20±1.0	14	20	1.4:1	3.5mm-F	28.45x16.26x13.4
CDC18401012K	18000-40000	1.7	10±0.7	12	20	1.7:1	2.92mm-F	28.45x16.26x13.4
CDC18402012K	18000-40000	1.3	20±1.0	12	20	1.7:1	2.92mm-F	28.45x16.26x13.4
CDC18501010K	18000-50000	1.9	10±0.7	10	20	1.8:1	2.4mm-F	28.45x15.75x10.1
CDC18502010K	18000-50000	1.5	20±1.0	10	20	1.8:1	2.4mm-F	28.45x15.75x10.1
CDC26401012K	26500-40000	1.7	10±0.7	12	20	1.7:1	2.4mm-F	28.45x15.75x10.1
CDC26402012K	26500-40000	1.3	20±1.0	12	20	1.7:1	2.4mm-F	28.45x15.75x10.1
CDC26501010K	26500-50000	1.9	10±0.7	10	20	1.8:1	2.4mm-F	28.45x15.75x10.1
CDC26502010K	26500-50000	1.5	20±1.0	10	20	1.8:1	2.4mm-F	28.45x15.75x10.1

OTHER FREQUENCIES ARE ALSO AVAILABLE.

*CONSULT THE FACTORY.



Directional Couplers (Waveguide and Coaxial)

CAVITY:

Model Number	Frequency Range (MHz)	Insertion Loss (dB) Max.	Coupling (dB)	Directivity (dB)	Power Avg (W) Max.	VSWR Max.	Connector Type	Case Type (mm)
CDCU8020520H	800-2500	1.95	5±0.5	20	200	1.2:1	N-F	*
CDCU8020620H	800-2500	1.50	6±0.5	20	200	1.2:1	N-F	*
CDCU8020620S	800-2500	0.2	6±0.7	20	200	1.3:1	N-F	120 x 40 x 17
CDCU8020720H	800-2500	1.30	7±0.5	20	200	1.2:1	N-F	*
CDCU8020720S	800-2500	0.2	7±0.7	20	200	1.3:1	N-F	120 x 40 x 17
CDCU8021020H	800-2500	0.75	10±0.6	20	200	1.2:1	N-F	*
CDCU8021020S	800-2500	0.2	10±0.7	20	200	1.3:1	N-F	120 x 40 x 17
CDCU8021220S	800-2500	0.2	12±0.7	20	200	1.3:1	N-F	120 x 40 x 17
CDCU8021520S	800-2500	0.2	15±0.7	20	200	1.3:1	N-F	120 x 40 x 17
CDCU8021520H	800-2500	0.33	15±1.0	20	200	1.2:1	N-F	*
CDCU8022020S	800-2500	0.2	20±0.7	20	200	1.3:1	N-F	120 x 40 x 17
CDCU8022020H	800-2500	0.21	20±1.0	20	200	1.2:1	N-F	*
CDCU8022520H	800-2500	0.2	25±1.0	20	200	1.2:1	N-F	*
CDCU8022520S	800-2500	0.2	25±1.0	20	200	1.3:1	N-F	120 x 40 x 17
CDCU8023020S	800-2500	0.2	30±1.0	20	200	1.3:1	N-F	120 x 40 x 17
CDCU8023520S	800-2500	0.2	35±1.0	20	200	1.3:1	N-F	120 x 40 x 17
CDCU8024020S	800-2500	0.2	40±1.0	20	200	1.3:1	N-F	120 x 40 x 17
CDC01020520S	1700-2500	0.2	5±0.5	20	200	1.3:1	N-F	58 x 19 x 21
CDC01020620S	1700-2500	0.2	6±0.5	20	200	1.3:1	N-F	58 x 19 x 21
CDC01020720S	1700-2500	0.2	7±0.5	20	200	1.3:1	N-F	58 x 19 x 21
CDC01021020S	1700-2500	0.2	10±0.5	20	200	1.3:1	N-F	58 x 20 x 21
CDC01021220S	1700-2500	0.2	12±0.5	20	200	1.3:1	N-F	58 x 25 x 21
CDC01021520S	1700-2500	0.2	15±0.5	20	200	1.3:1	N-F	58 x 25 x 21
CDC01022020S	1700-2500	0.2	20±0.5	20	200	1.3:1	N-F	58 x 29 x 21
CDC01022520S	1700-2500	0.2	25±0.5	20	200	1.3:1	N-F	58 x 29 x 21
CDC01023020S	1700-2500	0.2	30±0.5	20	200	1.3:1	N-F	58 x 29 x 21
CDC01023520S	1700-2500	0.2	35±0.5	20	200	1.3:1	N-F	58 x 29 x 21

OTHER FREQUENCIES ARE ALSO AVAILABLE.

*CONSULT THE FACTORY

WAVEGUIDE:

Waveguide Band	K	Kb	Ka	Q	U	V	E	W
Frequency Range (GHz)	18 to 26.5	22 to 33.0	26.5 to 40	33 to 50	40 to 60	50 to 75	60 to 90	75 to 110
Waveguide Size	WR-42	WR34	WR-28	WR-22	WR-19	WR-15	WR-12	WR-10
Coupling Level (dB, Typical)	3, 6, 10, 20, 30 and 40							
Coupling Flatness (dB, Maximum)	± 0.4	± 0.4	± 0.4	± 0.4	± 0.4	± 0.4	± 0.4	± 0.5



Directional Couplers (Waveguide and Coaxial)

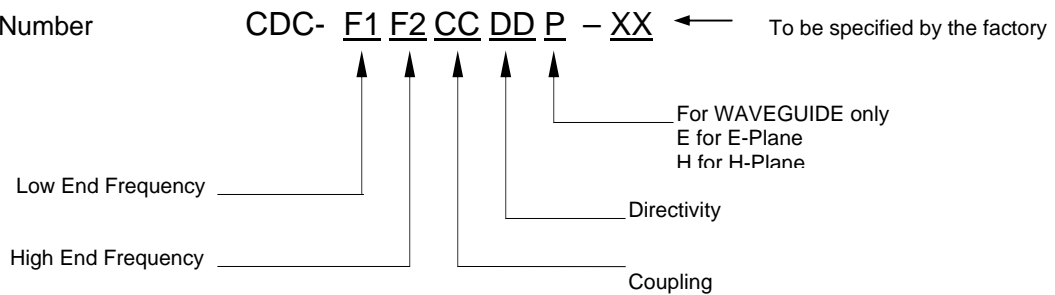
Insertion Loss (dB, Typical)*	0.7	0.7	0.7	0.7	0.8	1.0	1.2	1.5
Directivity (dB, Typical)	20, 25, 30, 35, 40							
Main Line VSWR (Maximum)	1.1:1	1.1:1	1.1:1	1.1:1	1.2:1	1.2:1	1.2:1	1.2:1
Secondary Line VSWR (Maximum)	1.1:1	1.1:1	1.1:1	1.2:1	1.2:1	1.2:1	1.25:1	1.25:1

CONTACT FACTORY FOR OTHER WAVEGUIDE SIZE OR COUPLING LEVEL NEEDS.

* INSERTION LOSS IS DEFINED AS THE POWER LOSS IN ADDITION TO THE COUPLING LOSS

HOW TO ORDER:

Specify Model Number



Example: To order a coupler with F1 at 20GHz and F2 at 21 GHz with coupler level of 20dB and a 15dB Minimum directivity, specify CDC-20212015-XX.

CERNEX RESERVE THE RIGHT TO CHANGE THE SPECIFICATIONS WITHOUT NOTICE