



# 20V4/20V8GBDK-Directional Couplers

4-Way & 8-Way "U-Link" passives

Digitap

20V4/20V8GBDK-Directional Couplers



The new RMS DigiTaps are the way to eliminate interference between high level return path signals and forward band transmission in a two way network. RMS DigiTaps are available in 4-way or 8-way configurations and can be joined together to form a panel of up to 64 ports using RMS's patented U-Link. The 4-Way 8dB (terminating) & 8-Way 11dB (terminating) are also ideal for headend or test lab splitters/combiners.

## Features:

- Bandwidth 5MHz to 1GHz
- RFI Shielding >-130dB
- Micro-strip designed PCB for consistency of specifications and superior total bandwidth characteristics
- Premium ferrites, resistors and capacitors
- Laminated ID label that will not fade
- Zinc housing that is chromated and plated for maximum corrosion resistance
- SCTE compliant "F" ports that are neoprene sealed.
- Input/Output ports are die-cast into housing
- 100% quality control at our factory
- Inter-Mod spec of >-110dBc
- Dual flush mounting tabs for vertical/horizontal installations
- Dual integrated heavy duty ground screw
- Modified 360 degree contacts that offer excellent contact between coax and F61 it also has an excellent wiping action
- Concave solder back design assures 100% sealing of back plate to the housing and prevents pinholes
- Excellent insertion loss, tap loss, isolation (port/port) & return loss (input/output)
- Can be joined together using RMS's patented "U-Link"
- CE approved

RMS Communications Inc

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# 20V4/20V8GBDK-Directional Couplers

4-Way & 8-Way "U-Link" passives

20V4GBDK-* Specifications										20V8GBDK-* Specifications							
Tap Value	----->	8dB*	11dB*	14dB*	17dB*	20dB*	23dB*	26dB*	29dB*	11dB*	14dB*	17dB*	20dB*	23dB*	26dB*	29dB*	
Attenuation	5 - 10MHz	8.0	11.5	14.0	17.0	20.0	23.0	26.0	29.0	11.0	14.0	17.0	20.0	23.0	26.0	29.0	
(In - Tap)	10 - 15MHz	8.0	11.5	14.0	17.0	20.0	23.0	26.0	29.0	11.0	14.0	17.0	20.0	23.0	26.0	29.0	
Maximum	15 - 70MHz	8.0	11.0	14.0	17.0	20.0	23.0	26.0	29.0	11.0	14.0	17.0	20.0	23.0	26.0	29.0	
Loss in dB	70 - 300MHz	8.0	11.0	14.0	17.0	20.0	23.0	26.0	29.0	11.0	14.0	17.0	20.0	23.0	26.0	29.0	
	300 - 600MHz	8.0	11.0	14.0	17.0	20.0	23.0	26.0	29.0	11.0	14.0	17.0	20.0	23.0	26.0	29.0	
	600 - 750MHz	8.0	11.0	14.0	17.0	20.0	23.0	26.0	29.0	11.0	14.0	17.0	20.0	23.0	26.0	29.0	
	750 - 860MHz	8.0	11.5	14.0	17.0	20.0	23.0	26.0	29.0	11.0	14.0	17.0	20.0	23.0	26.0	29.0	
	860 - 1GHz	8.0	11.5	14.5	17.5	20.5	23.0	26.0	29.0	11.0	14.5	17.5	20.5	23.5	26.0	29.0	
	Tolerance	+/- 1.5	+/-1.5	+/-1.5	+/-1.5	+/-1.5	+/-1.5	+/-1.5	+/-1.5	+/-1.5	+/-1.5	+/-1.5	+/-1.5	+/-1.5	+/-1.5	+/-1.5	
Insertion Loss	5 - 10MHz	N/A	3.8	2.2	1.4	1.0	0.8	0.8	0.8	N/A	3.9	3.0	1.9	1.2	1.2	1.2	
(In - Out)	10 - 15MHz	N/A	3.8	2.2	1.4	1.0	0.8	0.8	0.8	N/A	3.9	2.9	1.8	1.1	1.2	1.1	
Maximum dB	15 - 70MHz	N/A	3.7	2.2	1.4	1.0	0.8	0.8	0.8	N/A	3.7	2.9	1.8	1.1	1.1	1.1	
	70 - 300MHz	N/A	3.7	2.2	1.4	1.0	0.8	0.8	0.8	N/A	3.7	2.9	1.8	1.1	1.1	1.1	
	300 - 600MHz	N/A	4.0	2.5	1.7	1.2	1.0	1.0	1.0	N/A	3.9	2.9	2.0	1.4	1.4	1.4	
	600 - 750MHz	N/A	4.1	2.7	1.8	1.4	1.1	1.1	1.1	N/A	4.0	3.0	2.3	1.5	1.5	1.5	
	750 - 860MHz	N/A	4.3	2.9	2.0	1.5	1.3	1.3	1.3	N/A	4.3	3.1	2.4	1.6	1.6	1.6	
	860 - 1GHz	N/A	4.5	3.1	2.1	1.6	1.3	1.3	1.4	N/A	4.4	3.2	2.7	1.7	1.7	1.7	
Isolation	5 - 10MHz	Term	22	25	28	30	32	35	38	Term	25	28	30	33	36	38	
(Out - Tap)	10 - 15MHz	Term	25	27	28	30	32	35	39	Term	28	29	32	34	36	38	
Min dB Loss	15 - 70MHz	Term	26	27	28	30	32	35	39	Term	28	30	32	34	36	38	
	70 - 300MHz	Term	26	27	28	30	31	34	39	Term	28	30	32	34	36	38	
	300 - 600MHz	Term	26	27	28	30	31	34	38	Term	28	29	31	33	36	38	
	600 - 750MHz	Term	26	27	28	30	31	34	35	Term	26	27	29	30	33	36	
	750 - 860MHz	Term	26	27	28	30	30	33	34	Term	26	27	28	28	31	33	
	860 - 1GHz	Term	24	24	25	27	28	30	32	Term	26	25	25	26	29	30	
Isolation	5 - 10MHz	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	
(Tap - Tap)	10 - 15MHz	23	23	23	23	23	23	23	23	24	24	24	24	24	24	24	
Min dB Loss	15 - 70MHz	24	24	24	24	24	24	24	24	25	25	25	25	25	25	25	
	70 - 300MHz	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	
	300 - 600MHz	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	
	600 - 750MHz	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	
	750 - 860MHz	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	
	860 - 1GHz	22	22	22	22	22	22	22	22	22	20	22	20	22	22	22	
Return Loss	5 - 10MHz	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	
(In & Out)	10 - 15MHz	18	18	18	18	18	18	18	18	18	19	18	18	18	18	18	
Min Loss dB	15 - 70MHz	18	18	18	18	18	18	18	19	18	19	18	18	19	19	18	
	70 - 300MHz	18	19	19	18	18	19	18	18	18	19	19	19	18	19	19	
	300 - 600MHz	18	19	19	19	18	18	18	18	18	18	19	18	18	18	18	
	600 - 750MHz	18	18	18	18	18	18	18	18	18	18	19	18	18	18	18	
	750 - 860MHz	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	
	860 - 1GHz	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	
Return Loss	5-10MHz	14	14	14	14	15	15	15	15	14	15	15	15	15	15	15	
(Tap)	10-600MHz	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	
Min Loss dB	600-1GHz	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	
Tap Distortion	All Ports	>-110dBc from 40MHz to 1GHz with one 60DBmV signal in the reverse path (Harmonics 2nd and higher orders)															
Size	20V4 Length 3.97"(100mm)XWidth 2.25"(57mm)XHeight 1.64"(42mm)									20V8 Length 3.97"(100mm)XWidth 2.25"(57mm)XHeight 1.64"(42mm)							
U-Link -->	Specifications	Size: Length 2.18" (55mm) X Diameter 0.51" (13mm) X Height 1.75" (44mm) - Return Loss >20dB 5MHz - 1GHz															
* = Specify dB Value ie: 17dB 4-way is 20V4GBDK-17			N/A = Not Applicable			Term = Indicates terminating tap (No output port)											
Please Note: 20V4's and 20V8's are available with or without terminators on the tap ports (Please specify)																	

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