

Coaxial Attenuators

Low, medium and high power

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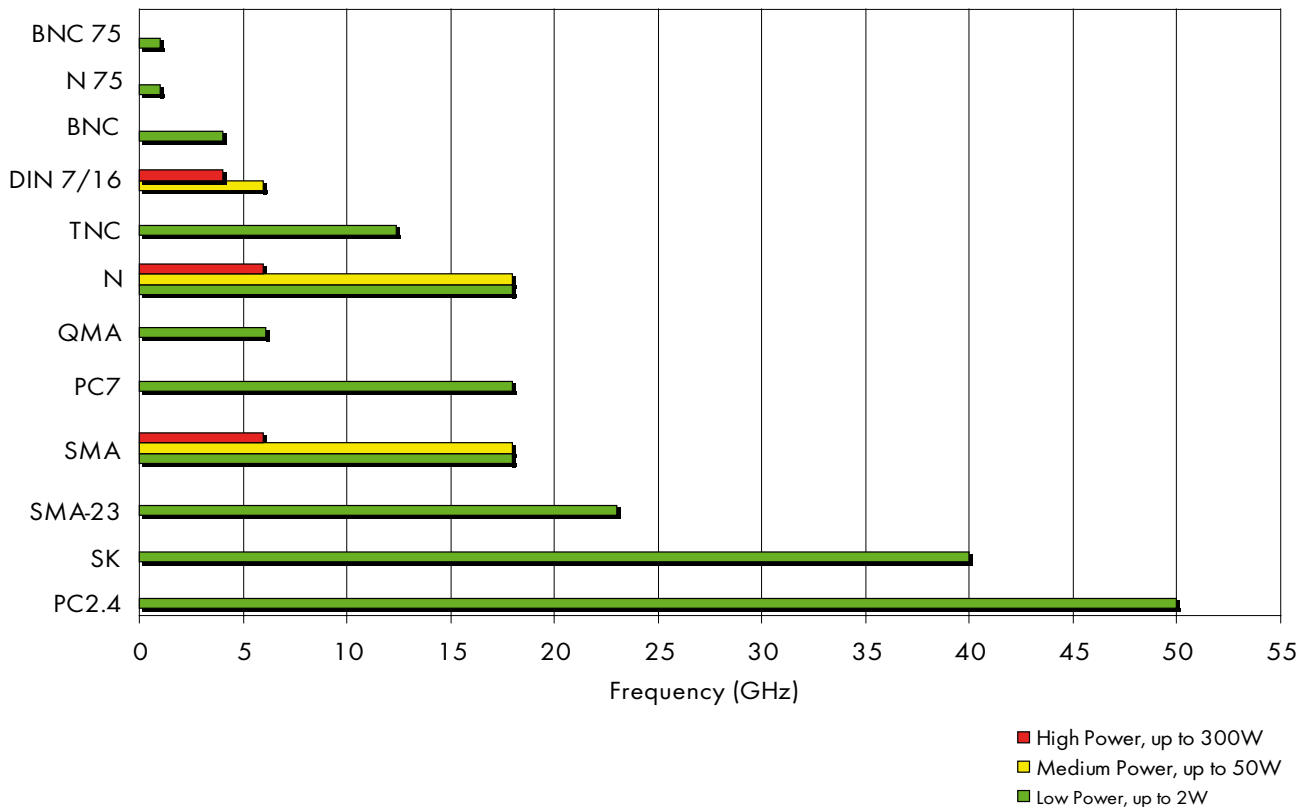
Product Description

RF attenuators are used to reduce the input power. They are used in many test+measurement and communication applications (e.g. as fine power adjuster between different channels or as a protection for the input of the network analyzer).

Features and benefits

- Broadband
- Wide selection of interfaces and attenuation values
- According IEC/MIL/CECC interface standard
- High repeatability

Attenuators quick selection chart



Product details

Specification sheets and outline drawings are available on request or on our website hubersuhner.com.

Power handling capability

The referenced average power is applicable at 25 °C ambient temperature. For higher ambient temperature a certain power derating may be required. Please see detailed product specification. Medium and high power products must be mounted in such a way that free air convection around heat sink is given to assure performance.

Low Power Attenuators, up to 2 Watts

BNC, 50 Ω , connector configuration male to female

Frequency DC to (GHz)	VSWR max.	Return loss min. (dB)	Power rating (W)	Nom. attenuation (dB)	HUBER+SUHNER type	Item no.
4	1.2	20.8	2	1	6801.01.A	22641542
				2	6802.01.A	22641543
				3	6803.01.A	22550177
				6	6806.01.A	22550178
				10	6810.01.A*	22550179
				20	6820.01.A*	22550180
				30	6830.01.A*	22550181

* 1 Watt power rating



BNC, 75 Ω , connector configuration male to female

Frequency DC to (GHz)	VSWR max.	Return loss min. (dB)	Power rating (W)	Nom. attenuation (dB)	HUBER+SUHNER type	Item no.
1	1.15	23.1	1	3	6903.02.A	22550074
				6	6906.02.A	22550088
	1.2	20.8	0.5	10	6910.02.A	22550124
				20	6920.02.A	22550138
0.7	1.2	20.8	0.5	30	6930.02.A	22550159



Low Power Attenuators, up to 2 Watts

N, 50 Ω, connector configuration male to female

Frequency DC to (GHz)	VSWR max.	Return loss min. (dB)	Power rating (W)	Nom. attenuation (dB)	HUBER+SUHNER type	Item no.				
6	1.25	19.1	2	1	6801_N-50-1	84066765				
				2	6802_N-50-1	84066769				
				3	6803_N-50-1	84066770				
				4	6804_N-50-1	84066772				
				5	6805_N-50-1	84066786				
				6	6806_N-50-1	84066798				
				7	6807_N-50-1	84066801				
				8	6808_N-50-1	84066802				
				9	6809_N-50-1	84066808				
				10	6810_N-50-1	84066809				
				12	6812_N-50-1	84066813				
				15	6815_N-50-1	84066814				
				20	6820_N-50-1	84066815				
				30	6830_N-50-1	84066817				
12.4	1.35	19.1	2	1	6801.17A	22641535				
	1.25			2	6802.17A	22641536				
				3	6803.17A	22550182				
				4	6804.17A	22641537				
				5	6805.17A	22641538				
				6	6806.17A	22550183				
				7	6807.17A	22641539				
				8	6808.17A	22641540				
				9	6809.17A	22641541				
				10	6810.17A*	22550185				
				20	6820.17A*	22550186				
				30	6830.17A*	22550187				
				18	1.25	19.1	2	3	6803.17B	22550188
								6	6806.17B	22550189
10	6810.17B*	22550190								
20	6820.17B*	22550191								
30	6830.17B*	22550192								

* 1 Watt power rating

N, 75 Ω, connector configuration male to female

Frequency DC to (GHz)	VSWR max.	Return loss min. (dB)	Power rating (W)	Nom. attenuation (dB)	HUBER+SUHNER type	Item no.
1	1.15	23.1	1	3	6903.18.A	22550218
				6	6906.18.A	22550219
			0.8	10	6910.18.A	22550220
			0.5	20	6920.18.A	22550221
0.7	1.2	20.8	0.5	30	6930.18.A	22550222



Low Power Attenuators, up to 2 Watts

PC2.4, 50 Ω , connector configuration male to female

Frequency DC to (GHz)	VSWR max.	Return loss min. (dB)	Power rating (W)	Nom. attenuation (dB)	HUBER+SUHNER type	Item no.
50	1.75	11.3	0.5	3	6603_PC2.4-50-1	84058353
				6	6606_PC2.4-50-1	84058358
				10	6610_PC2.4-50-1	84058360
				20	6620_PC2.4-50-1	84058363
				30	6630_PC2.4-50-1	84058370



PC7, 50 Ω , connector configuration male to female

Frequency DC to (GHz)	VSWR max.	Return loss min. (dB)	Power rating (W)	Nom. attenuation (dB)	HUBER+SUHNER type	Item no.
18	1.2	20.8	2	3	6803.28.A	22550198
				6	6806.28.A	22550199
			1	10	6810.28.A	22550023
				20	6820.28.A	22550025
				30	6830.28.A	22550027



QMA, 50 Ω , connector configuration male to female

Frequency DC to (GHz)	VSWR max.	Return loss min. (dB)	Power rating (W)	Nom. attenuation (dB)	HUBER+SUHNER type	Item no.
6	1.2	20.8	2	1	6801_QMA-50-2	84058439
				2	6802_QMA-50-2	84058442
				3	6803_QMA-50-2	84058454
				4	6804_QMA-50-2	84058455
				5	6805_QMA-50-2	84058456
				6	6806_QMA-50-2	84058457
				7	6807_QMA-50-2	84058458
				8	6808_QMA-50-2	84058459
				9	6809_QMA-50-2	84058460
				10	6810_QMA-50-2	84058461
				12	6812_QMA-50-2	84057787
				15	6815_QMA-50-2	84058463
				20	6820_QMA-50-2	84058212



Low Power Attenuators, up to 2 Watts

SK, 50 Ω, connector configuration male to female

Frequency DC to (GHz)	VSWR max.	Return loss min. (dB)	Power rating (W)	Nom. attenuation (dB)	HUBER+SUHNER type	Item no.
40	1.4	15.6	0.5	3	6603_SK-50-1	84076856
				6	6606_SK-50-1	84076855
				10	6610_SK-50-1	84076854
				20	6620_SK-50-1	84076850



SMA, 50 Ω, connector configuration male to female

Frequency DC to (GHz)	VSWR max.	Return loss min. (dB)	Power rating (W)	Nom. attenuation (dB)	HUBER+SUHNER type	Item no.
6	1.2	20.8	2	1	6601_SMA-50-2	84037361
				2	6602_SMA-50-2	84034481
				3	6603_SMA-50-2	84036311
				4	6604_SMA-50-2	84034272
				5	6605_SMA-50-2	84037414
				6	6606_SMA-50-2	84037343
				7	6607_SMA-50-2	84037410
				8	6608_SMA-50-2	84037388
				9	6609_SMA-50-2	84037381
				10	6610_SMA-50-2	84036452
				15	6615_SMA-50-2	84037424
				18	6618_SMA-50-2	84037420
				20	6620_SMA-50-2	84037362
				30	6630_SMA-50-2	84037372
18	1.35	16.5	2	1	6801.19.A ¹⁾	22641550
				2	6802.19.A ¹⁾	22641555
				3	6803.19.A ¹⁾	22550028
			1	4	6804.19.A ¹⁾	22641554
				5	6805.19.A ¹⁾	22641553
				6	6806.19.A ¹⁾	22550030
				7	6807.19.A ¹⁾	22641552
				8	6808.19.A ¹⁾	22641551
				9	6809.19.A ¹⁾	22641566
				10	6810.19.A ¹⁾	22550031
				20	6820.19.A ¹⁾	22550042
				30	6830.19.A ¹⁾	22550052



¹⁾ Special body with gold plating and without epoxy captivation for better EMC shielding.

Low Power Attenuators, up to 2 Watts

SMA, 50 Ω, connector configuration male to female

Frequency DC to (GHz)	VSWR max.	Return loss min. (dB)	Power rating (W)	Nom. attenuation (dB)	HUBER+SUHNER type	Item no.
18	1.35	16.5	2	1	6601_SMA-50-1	84037360
				2	6602_SMA-50-1	84030799
				3	6603_SMA-50-1	84036313
				4	6604_SMA-50-1	84034265
				5	6605_SMA-50-1	84037413
				6	6606_SMA-50-1	84037341
				7	6607_SMA-50-1	84037409
				8	6608_SMA-50-1	84037387
				9	6609_SMA-50-1	84037379
				10	6610_SMA-50-1	84036459
				15	6615_SMA-50-1	84037421
				18	6618_SMA-50-1	84037417
				20	6620_SMA-50-1	84037363
				30	6630_SMA-50-1	84037371
23	1.4	15.6	2	1	6601_SMA-50-3	84066837
				2	6602_SMA-50-3	84066840
				3	6603_SMA-50-3	84066841
				4	6604_SMA-50-3	84066842
				5	6605_SMA-50-3	84066844
				6	6606_SMA-50-3	84066845
				7	6607_SMA-50-3	84066847
				8	6608_SMA-50-3	84066850
				9	6609_SMA-50-3	84066851
				10	6610_SMA-50-3	84066853
				12	6612_SMA-50-3	84066854
				15	6615_SMA-50-3	84066855
				20	6620_SMA-50-3	84066879
				30	6630_SMA-50-3	84066884



TNC, 50 Ω, connector configuration male to female

Frequency DC to (GHz)	VSWR max.	Return loss min. (dB)	Power rating (W)	Nom. attenuation (dB)	HUBER+SUHNER type	Item no.
12.4	1.4	15.6	2	3	6803.26.A	22543746
				6	6806.26.A	22550194
			1	10	6810.26.A	22550195
				20	6820.26.A	22550196
				30	6830.26.A	22550197



Medium Power Attenuators, up to 50 Watts

N, 50 Ω, connector configuration male to female

Power rating (W)	Frequency DC to (GHz)	VSWR max.	Return loss min. (dB)	Nom. attenuation (dB)	HUBER+SUHNER type	Item no.
5	6	1.2	20.8	1	5901_N-50-6	84060474
				2	5902_N-50-6	84060477
				3	5903_N-50-6	84060582
				4	5904_N-50-6	84060583
				5	5905_N-50-6	84060584
				6	5906_N-50-6	84060587
				7	5907_N-50-6	84060588
				8	5908_N-50-6	84060589
				9	5909_N-50-6	84060590
				10	5910_N-50-6	84060597
				12	5912_N-50-6	84060646
				15	5915_N-50-6	84060647
				20	5920_N-50-6	84060649
				30	5930_N-50-6	84060653
10	6	1.25	19.1	3	5903.170003	22648036
		1.35	16.5	6	5906.170003	22648039
	18	1.4	15.6	3	5903_N-50-010	84060166
				6	5906_N-50-010	84060181
				10	5910_N-50-010	84060182
				20	5920_N-50-010	84060186
				30	5930_N-50-010	84060452
				40	5940_N-50-010	84060453
25	6	1.25	19.1	3	5903.170004	22648037
				6	5906.170004	22648040
		1.2	20.8	10	5910_N-50-025	84067096
				20	5920_N-50-025	84067101
				30	5930_N-50-025	84067102
50	6	1.25	19.1	3	5903.170005	22648038
		1.35	16.5	6	5906.170005	22648041
		1.25	19.1	10	5910_N-50-050*	84067128
				20	5920_N-50-050*	84067127
				30	5930_N-50-050*	84064545

* Unidirectional unit, input port is the male connector.



Medium Power Attenuators, up to 50 Watts

SMA, 50 Ω, connector configuration male to female

Power rating (W)	Frequency DC to (GHz)	VSWR max.	Return loss min. (dB)	Nom. attenuation (dB)	HUBER+SUHNER type	Item no.
5	18	1.35	16.5	3	5903_SMA-50-005	84066683
				6	5906_SMA-50-005	84066745
				10	5910_SMA-50-005	84066751
				20	5920_SMA-50-005	84066757
				30	5930_SMA-50-005	84066762
				40	5940_SMA-50-005	84066764
10	6	1.2	20.8	3	5903.19.0001	22659280
				6	5906.19.0002	22651220
	18	1.35	16.5	3	5903_SMA-50-010	84066939
				6	5906_SMA-50-010	84066946
				10	5910_SMA-50-010	84066948
				20	5920_SMA-50-010	84066949
				30	5930_SMA-50-010	84066962
				40	5940_SMA-50-010	84066987
25	6	1.25	19.1	3	5903.19.0002	22659518
		1.35	16.5	6	5906.19.0003	22659520
		1.2	20.8	10	5910_SMA-50-025	84066923
				20	5920_SMA-50-025	84066927
				30	5930_SMA-50-025	84066931
50	6	1.35	16.5	6	5906.19.0004	22659521
		1.25	19.1	10	5910_SMA-50-050*	84066933
				20	5920_SMA-50-050*	84066935
				30	5930_SMA-50-050*	84066936

* Unidirectional unit, input port is the male connector.



DIN 7/16, 50 Ω, connector configuration male to female

Power rating (W)	Frequency DC to (GHz)	VSWR max.	Return loss min. (dB)	Nom. attenuation (dB)	HUBER+SUHNER type	Item no.
10	6	1.25	19.1	3	5903.41.0001	22652689
		1.35	16.5	6	5906.41.0001	22652690
		1.45	14.7	10	5910_716-50-010	84067139
				20	5920_716-50-010	84067141
				30	5930_716-50-010	84067142
25	6	1.35	16.5	6	5906.41.0002	22651235
		1.2	20.8	10	5910_716-50-025	84067156
				20	5920_716-50-025	84067171
50	6	1.25	19.1	3	5903.41.0003	22651243
				6	5906.41.0003	22650373
		1.45	14.7	10	5910_716-50-050*	84067275
				20	5920_716-50-050*	84067278
				30	5930_716-50-050*	84067279

* Unidirectional unit, input port is the male connector.

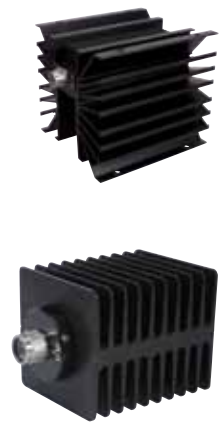


High Power Attenuators, up to 300 Watts

N, 50 Ω, connector configuration male to female

Power rating (W)	Frequency DC to (GHz)	VSWR max.	Return loss min. (dB)	Nom. attenuation (dB)	HUBER+SUHNER type	Item no.
100	6	1.45	14.7	3	5903_N-50-1	84060038
				6	5906_N-50-1	84060058
				10	5910_N-50-1	84060059
				20	5920_N-50-1	84060060
				30	5930_N-50-1	84048317
				40	5940_N-50-1	84060078
200	4	1.35	16.5	3	5903_N-50-200	84067251
				6	5906_N-50-200	84067260
				10	5910_N-50-200	84067268
				20	5920_N-50-200	84067269
		1.5	14.0	30	5930_N-50-200	84067272
		250	6	1.3	17.7	3
6	5906_N-50-250					84065181
10	5910_N-50-250					84065183
20	5920_N-50-250					84065184
30	5930_N-50-250					84065185
40	5940_N-50-250					84065182
300	4	1.35	16.5	3	5903_N-50-300	84065030
				6	5906_N-50-300	84065095
				10	5910_N-50-300	84065098
				20	5920_N-50-300	84065099
		1.5	14.0	30	5930_N-50-300	84065102
		40	5940_N-50-300	84065104		

All units are unidirectional, input port is the male connector.



SMA, 50 Ω, connector configuration male to female

Power rating (W)	Frequency DC to (GHz)	VSWR max.	Return loss min. (dB)	Nom. attenuation (dB)	HUBER+SUHNER type	Item no.
100	6	1.45	14.7	3	5903_SMA-50-1	84066892
				6	5906_SMA-50-1	84066893
				10	5910_SMA-50-1	84066902
				20	5920_SMA-50-1	84066903
				30	5930_SMA-50-1	84066904

All units are unidirectional, input port is the male connector.



High Power Attenuators, up to 300 Watts

DIN 7/16, 50 Ω , connector configuration male to female

Power rating (W)	Frequency DC to (GHz)	VSWR max.	Return loss min. (dB)	Nom. attenuation (dB)	HUBER+SUHNER type	Item no.
100	2.5	1.35	16.5	3	5903_716-50-1	84060159
				6	5906_716-50-1	84060655
				10	5910_716-50-1	84060657
				20	5920_716-50-1	84060658
				30	5930_716-50-1	84060692
				40	5940_716-50-1	84060693

All units are unidirectional, input port is the male connector.

