

Amplifiers

Qualwave supplies broadband, low noise and high power amplifiers in a broad range from 4kHz to 260GHz.

Power Amplifiers

Power amplifier, connected in the end of transmitter, is used to amplify the power of modulated signal in HF, which will then be transmitted to the space by antennas, and ensure the receiver could get proper signal level and the signal does not interfere with the communication of adjacent channels.

Features: Broadband, High Power; **Applications:** Wireless, Transmitter, Radar, Laboratory Test.

How To Order:

QPAV-W-X-Y-Z

Modules: Blank, Systems: S
 Start Frequency (MHz)
 Stop Frequency (MHz)

P1dB (dBm)
 (Note: if it is Psat, add "S" at the end)
 Gain (dB)



Examples: To order a power amplifier module, 0.03~1GHz, gain 45dB, Psat 30dBm, specify QPA-30-1000-45-30S.

Power Amplifier Modules

The sizes in the following table do not include connectors. PA system with AC 110~250V power supply is available.

Part Number	Frequency (GHz)	Psat (dBm)	P1dB (dBm)	Gain (dB)	Gain Flatness (dB)	Voltage* (V DC)	VSWR	Size* (mm)
QPA-0.1-500-43-40	0.0001~0.5	-	40	43	±2.5	24	2	200*101*27.8
QPA-0.1-3000-25-26	0.0001~3	-	26	25	±4	28	2	118*73*35
QPA-1-60-23-23	0.001~0.06	-	23	23	-	5	1.8	32*30*12
QPA-2-30-58-60S	0.002~0.03	60	-	58	±2	50	2	240*125*45
QPA-5-500-46-37S	0.005~0.5	37	-	46	±2	24~28	2	116*49*25
QPA-10-2500-30-37S	0.01~2.5	37	-	30	±3.5	32	2.4	120*68.5*25
QPA-10-2500-40-40S	0.01~2.5	40	-	40	±3.5	32	2.4	120*68.5*25
QPA-10-3000-30-29	0.01~3	-	29	30	±2	24	2	75.5*48*15
QPA-10-3000-30-29-1	0.01~3	-	29	30	±2	24	2	75*48*15
QPA-20-500-40-50S	0.02~0.5	50	-	40	±2.5	32	2	198*88*25
QPA-20-1000-36-18	0.02~1	-	18	36	±2.5	5	2	40*30*15
QPA-20-6000-40-36	0.02~6	38	36	40	±4	15	2.5	135*100*25
QPA-25-530-48.5-51.8S	0.025~0.53	51.8	-	48.5	±1.5	28	1.5	190.5*86.4*27.2
QPA-30-80-16-23	0.03~0.08	23	-	16	±1	12	1.8	64.3*34.3*20
QPA-30-500-32-37S	0.03~0.5	37	-	32	±1.5	12	2	80*50*20
QPA-30-1000-16-23	0.03~1	23	-	16	±1	12	1.8	64.3*34.3*20
QPA-30-1000-45-30S	0.03~1	30	-	40~45	±2.5	28	2	61*45*15
QPA-50-1000-26-35	0.05~1	-	35	26	±1	28	-	65*35*20
QPA-100-500-30-40S	0.1~0.5	40	-	30	±1	28	2	100*50*20
QPA-100-4000-60-20	0.1~4	-	20	60	±3	5	2	80*60*20
QPA-200-300-42-40S	0.2~0.3	40	-	42	±1	28	2	98*58*20
QPA-300-8000-12-27	0.3~8	-	27	12	±2	12	2	50*30*15
QPA-400-6000-30-25	0.4~6	-	25	30	±2	12	2	30*25*10
QPA-400-8000-40-22	0.4~8	-	22	40	±1.5	12	1.8	50*30*15
QPA-410-950-45-47S	0.41~0.95	47	-	45	±2	28	2	200*89*25
QPA-500-1000-49-52S	0.5~1	52	-	49	±1	28	1.5	190.5*86.36*27.178
QPA-500-2000-30-40S	0.5~2	40	-	30	±2	28	2	130*50*20
QPA-500-2500-46-43	0.5~2.5	-	43	46	±2.5	28	2	160*100*25
QPA-500-3000-47-46S	0.5~3	46	-	47	±3	32	2.4	198*88*25
QPA-500-6000-30-37	0.5~6	-	37	30	±3.5	50	2	80*60*20
QPA-600-12000-30-20	0.6~12	-	20	30	±1	12	1.8	50*30*15
QPA-617-894-42-48S	0.617~0.894	48	-	42	±2	32	2	198*88*35.7
QPA-700-4200-43-40S	0.7~4.2	40	-	43	±3	30	2	162*72*26
QPA-703-748-34.25-33	0.703~0.748	-	33	34.25	±0.75	12	2	98*58*20
QPA-750-6000-35-35	0.75~6	39	35	35	±3.5	50	2	61*45*15
QPA-791-821-45-40	0.791~0.821	-	40	45	±0.5	30	2	98*58*20
QPA-800-2000-40-39	0.8~2	-	39	40	±2	32	2	162*72*26
QPA-800-4200-47-46.5S	0.8~4.2	46.5	-	47	±2.5	32	2	198*88*25
QPA-925-960-42-48S	0.925~0.960	48	-	42	±2	32	2	198*88*35.7
QPA-950-2150-25-25	0.95~2.15	-	25	25	±1.5	5	2	48.5*29*10
QPA-1000-4000-43-40S	1~4	40	-	43	±2.5	32	2	158.5*68.5*25
QPA-1000-18000-35-30	1~18	-	30	35	±2	12	2	61*45*15
QPA-1000-26500-28-24	1~26.5	-	24	28	±1.5	12	2	50*30*15

The sizes in the following table do not include connectors. PA system with AC 110~250V power supply is available.

Part Number	Frequency (GHz)	Psat (dBm)	P1dB (dBm)	Gain (dB)	Gain Flatness (dB)	Voltage* (V DC)	VSWR	Size* (mm)
QPA-1100-1700-48-47S	1.1~1.7	47	-	48	±1.5	32	2	135*75*24.5
QPA-1500-1700-48-47S	1.5~1.7	47	-	48	±1.5	32	2	158.5*68.5*25
QPA-1500-1700-48-50S	1.5~1.7	50	-	48	±1.5	32	2	158.5*68.5*25
QPA-1500-5000-30-34	1.5~5	-	34	30	±5	32	2.4	162*72*26
QPA-1710-1785-35-33	1.71~1.785	-	33	35	±0.75	12	2	98*58*20
QPA-1800-2200-46-45S	1.8~2.2	45	-	46	±1	30	1.5	120*120*20
QPA-1805-1880-35-33	1.805~1.88	-	33	35	±0.75	28	2	98*58*20
QPA-1805-1880-45-40	1.805~1.88	-	40	45	±0.75	30	2	98*58*20
QPA-1805-1880-42-48S	1.805~1.88	48	-	42	±2	32	2	198*88*35.7
QPA-1920-1960-35-40	1.92~1.96	-	40	35	±0.5	220	2	98*58*20
QPA-1920-1980-34-33	1.92~1.98	-	33	34	±1	12	2	98*58*20
QPA-2000-3000-33-33	2~3	-	33	33	±3	30~32	2	120*75*18
QPA-2000-3500-46-42S	2~3.5	42	-	46	-	28	2	180*70*20
QPA-2000-6000-35-33S	2~6	33	-	35	±4	28	2	70*50*20
QPA-2000-6000-40-39	2~6	-	39	40	±2.5	28	2	80*60*20
QPA-2000-6000-40-39S	2~6	39	-	40	±2.5	28	2	-
QPA-2000-18000-40-40S	2~18	40	-	40	±3	32	2	120*80*15
QPA-2000-18000-40-47S	2~18	47	-	40	±6	28	2	230*180*35
QPA-2300-2700-30-42S	2.3~2.7	42	-	30	3	28	-	180*60*20
QPA-2110-2170-42-48S	2.11~2.17	48	-	42	±2	32	2	198*88*35.7
QPA-2300-2700-30-42S	2.3~2.7	42	-	30	3	28	-	180*60*20
QPA-2300-4200-53-47.8S	2.3~4.2	47.8	-	53	±2.5	50	2	200*89*25
QPA-2500-2570-34-33	2.5~2.57	-	33	34	±1	12	2	98*58*20
QPA-2500-2700-50-47.8S	2.5~2.7	47.8	-	50	±1	32	2	200*89*25
QPA-2570-2620-45-40	2.57~2.62	-	40	45	±0.75	30	2	98*58*20
QPA-2620-2690-45-40	2.62~2.69	-	40	45	±0.75	30	2	98*58*20
QPA-2620-2690-42-48S	2.62~2.69	48	-	42	±2	32	2	198*88*35.7
QPA-2700-2900-42-50S	2.7~2.9	50	-	42	±1	32	1.8	135*69
QPA-3300-3800-33.5-33	3.3~3.8	-	33	33.5	±1.5	28	2	98*58*20
QPA-3300-3800-42-48S	3.3~3.8	48	-	42	±2	32	2	198*88*35.7
QPA-3500-5000-47-47S	3.5~5	47	-	47	-	32	-	220*110*20
QPA-3500-5000-50-50S	3.5~5	50	-	50	-	32	-	260*180*20
QPA-4000-5000-42-41.7S	4~5	41.7	-	42	±2	24	2	165*50*20
QPA-4000-6000-40-47S	4~6	47	-	40	-	32	2	200*80*20
QPA-4400-4950-46-40S	4.4~4.95	40	-	46	±2	32	2	158.5*68.5*25
QPA-4400-5000-35-33	4.4~5	-	33	35	±2	12	2	80*55*20
QPA-5000-6000-32-32	5~6	-	32	32	±1	28	2	98*58*20
QPA-5100-5900-33-40S	5.1~5.9	40	-	33	±1.5	24	2	162*72*26
QPA-5250-5850-46-40S	5.25~5.85	40	-	46	±2	32	2	158.5*68.5*25
QPA-5600-5800-18-47	5.6~5.8	50	47	18~25	1	30	2	198*98*22.8
QPA-6000-18000-25-26S	6~18	26	-	25	±1	12	2	61*45*15
QPA-6000-18000-33-26S	6~18	26	-	33	±1	12	2	60*60*15
QPA-6000-18000-35-33S	6~18	33	-	35	±3	12	2	60*60*15
QPA-6000-18000-35-35S	6~18	35	-	35	±2.5	24~28	2	61*45*15
QPA-6000-18000-40-40S	6~18	40	-	40	±3	24~28	2	61*45*15
QPA-6000-18000-45-47S	6~18	47	-	45	-	28	2	240*200*40
QPA-8000-12000-45-46S	8~12	46	-	45	±2	28	2	100*80*20
QPA-8000-18000-30-30S	8~18	30	-	30	±3	8	2	61*45*15
QPA-8500-10500-25-43S	8.5~10.5	43	-	25	±0.5	28	2	100*80*20
QPA-12000-18000-25-30S	12~18	30	-	25	±2	5	2.5	61*45*15
QPA-12000-18000-38-27	12~18	-	27	38	±1.5	12	2	50*30*15
QPA-14400-15350-33-39	14.4~15.35	-	39	33	±0.5	12	2	150*120*20
QPA-15000-18000-30-33	15~18	-	33	30	±0.5	8	2	61*45*15
QPA-18000-22000-35-13	18~22	-	13	35	±1	5	2	50*30*15
QPA-18000-22000-40-33	18~22	-	33	40	±1	7.5	2	61*45*15
QPA-18000-26000-30-30S	18~26	30	-	30	±3.5	8	2.5	61*45*15
QPA-18000-26500-15-23	18~26.5	-	23	15	±1	9	1.8	50*30*15
QPA-18000-26500-30-30	18~26.5	-	30	30	-	8	2	61*45*15
QPA-18000-26500-40-40S	18~26.5	40	-	40	±2	8	2	150*120*20
QPA-18000-26500-45-40S	18~26.5	40	-	45	±3	28/-5	2	165*140*61
QPA-18000-40000-20-20	18~40	-	20	20	-	6	2	50*30*15
QPA-18000-40000-30-20	18~40	-	20	30	±2	12	1.8	30*20*12

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QPA-18000-40000-30-23S	18~40	23	-	30	±2.5	12	2.5	61*45*15
QPA-18000-40000-30-27	18~40	-	27	30	±2.5	12	2	150*120*15
QPA-18000-40000-30-30	18~40	-	30	30	±2.5	6	2	61*45*15
QPA-19000-21000-40-30	19~21	-	30	40	±1	8	2	61*45*15
QPA-20000-32000-22-21	20~32	-	21	22	±2.5	5	2	50*30*15
QPA-20000-32000-25-21	20~32	-	21	25	±1	8	1.5	50*30*15
QPA-20000-40000-33-29S	20~40	29	-	33	±2.5	5	2	61*45*15
QPA-22000-24000-25-30S	22~24	30	-	25	±1	6	1.8	50*30*15
QPA-23000-25000-15-27S	23~25	27	-	15	±0.5	12	1.5	61*45*15
QPA-24000-26000-30-30	24~26	-	30	30	-	8	2	50*30*15
QPA-24000-26000-30-32	24~26	-	32	30	-	8	2	80*60*20
QPA-25000-28000-18-25	25~28	-	25	18	-	6	2	50*30*15
QPA-25500-27500-20-30	25.5~27.5	-	30	20	±1.5	12	2	60*60*15
QPA-26000-40000-30-30S	26~40	30	-	30	±4	8	2,5	61*45*15
QPA-26500-40000-18-23	26.5~40	-	23	18	±1.5	6	1.8	60*40*15
QPA-26500-40000-25-30S	26.5~40	30	-	25	±5	12	2	50*50*15
QPA-26500-40000-27-27	26.5~40	-	27	27	±2	6.5	2	61*45*15
QPA-26500-40000-30-26S	26.5~40	26	-	30	±2	6	2	50*30*15
QPA-27000-31000-30-23	27~31	-	23	30	±1.5	12	2	50*30*15
QPA-27500-31200-25-25	27.5~31.2	-	25	25	±1	12	2	50*30*15
QPA-29000-31000-35-30	29~31	-	30	35	±1	6	2	61*45*15
QPA-29500-31500-20-30	29.5~31.5	-	30	20	±1	12	2	60*60*15
QPA-32000-36000-35-35S	32~36	35	-	35	±2.5	24~28	2	61*45*15
QPA-36000-50000-20-30	36~50	-	30	20	±1.5	5	2	120*100*28.6
QPA-37000-40000-45-34-F	37~40	-	34	45	-	6	2	80*60*20
QPA-37000-43000-10-15	37~43	-	15	10	±1.5	6	2	50*30*15
QPA-38000-42000-25-30	38~42	-	30	25	±1.5	6	2	80*60*20
QPA-39000-40000-40-33	39~40	-	33	40	-	6	2	61*45*15
QPA-40000-50000-20-20	40~50	-	20	20	-	6	2	50*30*28.6
QPA-40000-50000-45-29S	40~50	29	-	45	±2	5~6	2	150*120*30
QPA-40000-53000-40-18S	40~53	18	-	40	±2	5	2	50*30*15
QPA-40000-60000-35-20S	40~60	20	-	35	±5	7	2	45*30*40
QPA-40000-60000-25-26S	40~60	26	-	25	-	25	2	45*30*40
QPA-40000-60000-40-20S	40~60	20	-	40	±2.5	15	2	50*30*15
QPA-47000-52000-20-30S	47~52	30	-	20	±1.5	15	2	61*45*15
QPA-47000-52000-25-30S	47~52	30	-	25	±1.5	15	2	61*45*15
QPA-47000-52000-30-30S	47~52	30	-	30	±2	15	2	61*45*28.6
QPA-50000-75000-35-19S	50~75	19	-	35	-	7	2.5	50*40*24
QPA-55000-90000-20-19S	55~90	19	-	20	±1.5	5	2	35*30*22
QPA-60000-67000-30-27	60~67	30	27	30	±2	4.5	2	80*60*20
QPA-60000-90000-27-20S	60~90	20	-	27	-	7	2	75*40*22
QPA-61000-65000-18-26S	61~65	26	23	18	±1	5	2	100*80*19
QPA-61000-65000-20-20S	61~65	20	17	20	±1.5	5	2	30*19*19
QPA-75000-110000-25-15S	75~110	15	-	25	-	7	1.8	52*30*24
QPA-110000-150000-18-15S	110~150	15	-	18	-	7	3	35*30*22
QPA-210000-230000-12-20S	210~230	20	-	12	-	5	2	73*70*22
QPA-210000-230000-18-14S	215~230	14	-	18	-	7	3	35*28*22
QPA-215000-230000-16-10.5S	215~230	10.5	-	16	1.5	7	2.5	73*70*22