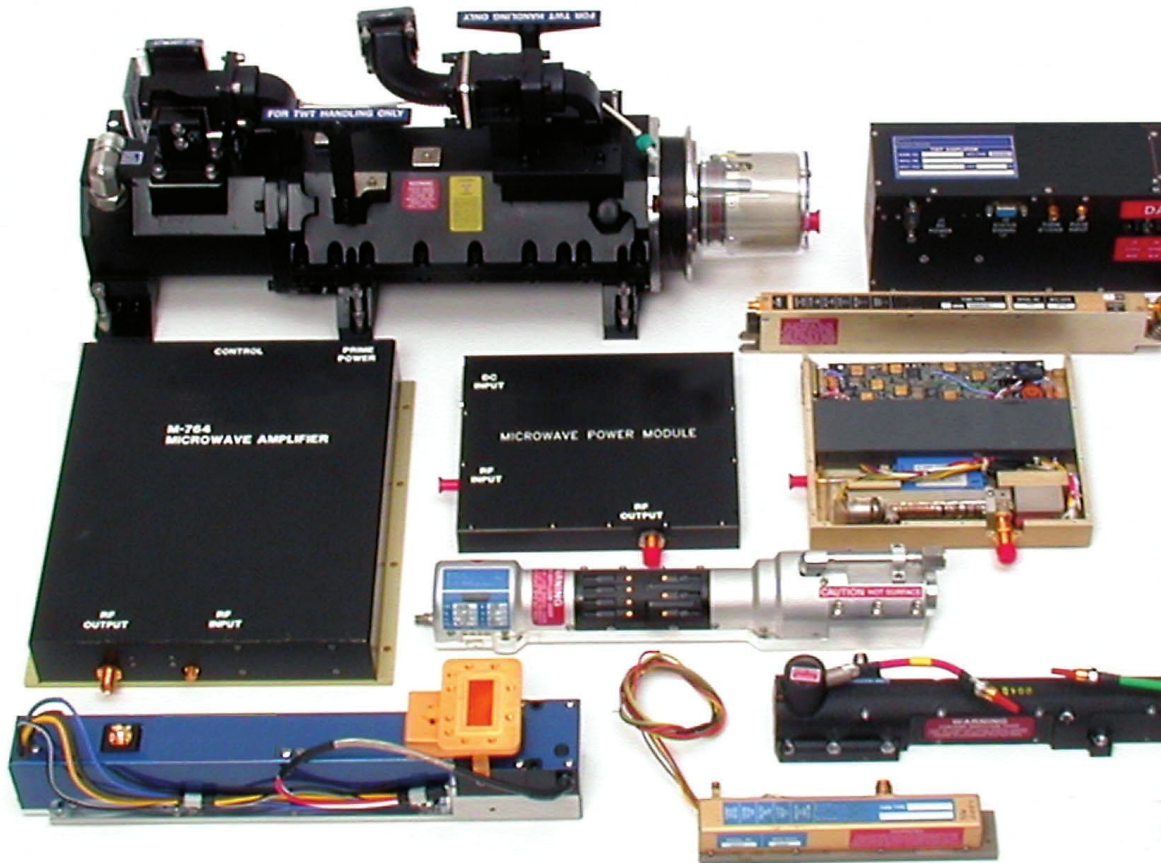


Electron Devices

For Military and Commercial Applications



НТЦ “Элеком СПб”
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POWER SUPPLIES	RING LOOP	HELIX CW		HELIX PULSED				
		Model	Frequency GHz	Output Power kW	Duty Cycle %	Rated Gain dB	Cathode Voltage kV	Cathode Current Amps
		L5827	0.7 – 2.0	1.0	4.0	30	-7.7	2.10
		L5873	2.5 – 8.0	1.0	8.0	45	-8.5	1.40
		L5843	7.0 – 16.5	0.3	7.0	48	-6.35	0.735
		L5850	8.5 – 10.5	2.0	6.0	60	-11	1.40
	L6022	7.5 – 18.0	1.0	5.0	50	-11	1.60	
	L6113	8.5 – 9.5	1.0	5.0	31	-7.5	1.0	
	Model	Frequency GHz	Output Power Watts	Rated Gain dB	Cathode Voltage KV	Cathode Current mA	Collector* Voltage kV	
	L2086	1.8 – 3.6	600	30	-5.6	770	4.00	
	L2124	2.5 – 7.5	400	35	-6.3	600	4.0 / 1.3	
	L6019	2.5 – 8.0	125	38	-5.0	315	3.0 / 2.0	
	L6021	7.5 – 18.0	125	42	-9.2	190	4.6 / 2.76	
	Model	Frequency GHz	Output Power KW	Duty Cycle %	Rated Gain dB	Cathode Voltage kV	Cathode Current Amps	
	L5714	2.0 – 2.6	20.0	0.04	45	-20.0	5.2	
	L6028	8.7 – 9.4	8.0	2.50	60	-15.0	2.6	
	Model	Frequency GHz	Output Power Watts	Small Signal Gain dB	Collector Stages	Dimensions L x W x H inches		
	L6115	2.0 – 8.0	65	21	Triple	10.5 x 1.5 x 1.25		
	L6043	2.0 – 8.0	50	30	Single	14.1 x 1.05 x 1.75		
	L5936	4.5 – 18.0	20	43	Single	12.05 x .0795 x 1.75		
L6035	4.5 – 18.0	35	30	Dual	9.0 x 1.8 x 1.0			
L6103	4.5 – 18.0	110	34	Triple	9.0 x 1.8 x 1.5			
L6084	5.0 – 10.0	200	35	Triple	11.0 x 1.3 x 1.5			
L5928	6.0 – 18.0	65	40	Single	12.25 x 1.035 x 1.81			
L6117	6.0 – 18.0	50	40	Single	12.05 x 0.840 x 2.44			
L6074	6.0 – 18.0	65	23	Triple	6.1 x 0.9 x 1.1			
L6130	6.0 – 18.0	100	27 – 38	Triple	development			
L5990	9.5 – 10.5	140	30	Single	7.3 x 1.3 x 1.25			
L6108	13.75 – 14.5	125	35	Dual	9.0 x 1.23 x 0.9			
L6083	26.0 – 40.0	20	30	Triple	6.0 x 1.0 x 1.0			
L6120	27.0 – 33.0	100	35	Triple	development			
L6112	40.0 – 46.0	50	30	Triple	6.0 x 1.0 x 1.0			
Model	Input Voltage	Application	Dimensions Inches	Weight Lbs				
M702	28 VDC	For L5843	12.0 x 3.0 x 4.0	8.5				
M713	3 Phase 50 – 400 Hz, 200 V μ , or 270 VDC	For 1 – 2 kW peak TWT	4.0 x 7.5 x 5.0	24				

COUPLED CAVITY	Model	Frequency GHz	Output Power kW	Max Duty %	Cathode Voltage kV	Cathode Current Amps	Rated Gain dB	Cooling	Collector* Voltage kV
	L5391	9.1 – 9.6	125	0.4	-45.3	13.5	45	Liquid	17
	L5630	9.0 – 9.2	20	0.5	-24.5	5.0	60	Air	17
	L6094	9.5 – 9.9	1.6	45	-11.5	0.7	50	Liquid	6.7
	L5638	9.5 – 10.0	15.0	4.0	-26.1	3.1	60	Liquid	14.4 / 6.5 / 5.2
	L5649	16.2 – 16.8	50	0.13	-37.0	6.2	60	Conduction	0
	L5652HI	9.8 – 10.3	40.0	3.5	-35	6.0	60	Liquid	20.65 / 13.3 / 9.1
	L5652LO	9.8 – 10.3	4.5	25.0	-35	1.4	30	Liquid	20.65 / 13.3 / 9.1
	L5755	9.4 – 10.0	26.0	1.2	-26	5.8	50	Air	11.0
	L5810	9.5 – 10.0	15.0	0.4	-23.5	4.0	60	Liquid	13.0
KLYSTRONS/SWITCH TUBES	Model	Frequency GHz	Output Power MW	Duty %	Instantaneous Bandwidth MHz	Rated Gain dB	Cathode Voltage kV	Cathode Current Amps	
	L5859	0.805	12	0.17	3	50	-180	155	
	L6048	0.805	2.75	10	1	45	-115	44	
	L5782	2.7 – 3.0	1.50	0.16	15	53	-79	44	
	L5892	2.8 – 3.2	3.0 – 4.5	0.18	400	38	-117	80	
	L5822	2.856	5.5	0.10	5	50	-127	92	
	Model	Hold Off Collector Voltage	Peak Collector Current	Average Collector Dissipation	Peak Mod-Anode Voltage	Pulse Width			
	L5097	170 kV	60 A	60 kW	20 kV	20 µsec			
	MICROWAVE POWER MODULES	Model	Frequency GHz	Output Power Watts	Input Voltage	Dimensions Inches	Weight Lbs	Application	
		M1000	2.0 – 8.0	50	90 – 260 VAC	12 x 10.5 x 2.0	12.0	Commercial	
M1020		6.0 – 18.0	60	90 – 260 VAC	10.3 x 9.6 x 2.0	10.0	Commercial		
M1025		14.0 – 14.5	80	90 – 260 VAC	10.3 x 9.6 x 2.0	10.0	Commercial		
M1040		26.0 – 40.0	20	90 – 260 VAC	12.0 x 10.0 x 2.0	12.0	Commercial		
M1220		6.0 – 18.0	60	270 VDC	7.5 x 6.25 x 1.0	3.75	Military		
M1221		6.0 – 18.0	60	28 VDC	7.8 x 7.5 x 1.25	4.0	Military		
M1231		12.75 – 14.5	80	270 VDC	7.5 x 6.25 x 1.0	3.75	Military		
M1232		12.75 – 14.5	75	115/208 VDC	7.5 x 6.2 x 1.6	4.5	Military		
M1270		X-Band	1 kw pulsed	28 VDC	11.0 x 6.0 x 2.0	9.0	Military		
M1282	26.0 – 40.0	20	28 VDC	7.5 x 8.5 x 1.25	6.0	Military			
ELECTRON GUNS	Model	Cathode Voltage kV	Grid Cutoff V	Grid Drive V	Heater Voltage V Max	Heater Current Amps Max	Perveance Micropervs	Duty Cycle Max	
	M592	-9.0 to -15	-55 to -65	50 to 70	6.3	2.0	0.01 to 1.4	0.04	
	M792	-4 to -25	-140	0 to 200	5.0 to 7.0	4.0 to 5.5	0.001 to 0.3	0.001 to 0.0021	

* All collector voltages are referenced to cathode.

SSPA - POWER AMPLIFIERS

PERFORMANCE CHARACTERISTICS

Model	SPA-X1-400	SPA-X2-100	SPA-KU1-400	SPA-KU2-100
Frequency Range (GHz)	8.5 to 10.9	8.5 to 10.9	13.5 to 16.8 or 14.5 to 17.0	13.5 to 16.8 or 14.5 to 17.0
Bandwidth, max (MHz)	400	800	1,000	500
Peak Saturated Output Power, min (W)	400	100	400	100
Average Output Power (W)	100	25	100	25
Load VSWR, max	2:1	2:1	2:1	2:1
Input RF Drive (dBm) ⁽¹⁾	23 ± 1 dB	-1 ± 5 dBm	10 ± 1 dB	12 ± 1 dB
Large Signal Gain, min (dB)	36	52	49	41
Pulse Width (µs)	0.2 - 15	0.4 - 256	0.5 - 25	0.5 - 45
Duty Cycle, max (%)	25	25	25	25
PRF (kHz)	2 - 240	1 - 15	2 - 600	2 - 320
Input Supply Voltage (V)	30 to 60	18 to 32	18 to 32	30 to 60
Current, max (Amp)	28	8	30	10
Efficiency, min (%)	17	17	15	15
RF Input Connector	SMA			
RF Output Connector	TNC			
Operating Temperature Range (°C)	-40 to +85			
Environmental Specifications	Per airborne applications			
MTBF, min (Hours)	12,000	25,000	12,000	25,000
Dimensions, approx. mm (inches)	280 x 140 x 75 (11 x 5.5 x 2.9)	229 x 178 x 30.5 (9 x 7 x 1.2)	280 x 140 x 75 (11 x 5.5 x 2.9)	229 x 178 x 30.5 (9 x 7 x 1.2)
Graceful Degradation	Embedded			
Switching Power Supply	Ultra quiet, non-synchronized architecture			

(1) Other Input Power levels are Optional

