

### Table H—INSTRUMENTATION POWER AMPLIFIERS

	Amplifier Model Number	Frequency Range (GHz)	Power Output (W)	Saturated Gain (dB)	Dimensions L x W x H (Inches)	Dimensions L x W x H (cm)	Weight (pounds)	Weight (kg)	Connector Type	Input Voltage (Vac. 1 $\phi$ )	Input Frequency (A)	TWT Model Number	Amplifier Model Number	
L-Band	1177H09F000	1.0-2.0	100	30	15.5 x 16.75 x 3.5	39.37 x 42.55 x 8.89	25.0	11.36	N	115.0	50/60	417H	1177H09F000	L-Band
	1277H09F000	1.0-2.0	200	30	15.5 x 16.75 x 3.5	39.37 x 42.55 x 8.89	25.0	11.36	N	115.0	50/60	418H	1277H09F000	
	1177H10F000	1.4-2.4	200	30	15.5 x 16.75 x 3.5	39.37 x 42.55 x 8.89	20.0	9.09	N	115.0	50/60	419H	1177H10F000	
S-Band	1177H01F000	2.0-4.0	100	30	15.5 x 16.75 x 3.5	39.37 x 42.55 x 8.89	20.0	9.09	N	115.0	50/60	564H	1177H01F000	S-Band
	1277H01F000	2.0-4.0	200	30	15.5 x 16.75 x 3.5	39.37 x 42.55 x 8.89	20.0	9.09	N	115.0	50/60	568H	1277H01F000	
	1177H05F000	2.5-4.0	200	30	15.5 x 16.75 x 3.5	39.37 x 42.55 x 8.89	20.0	9.09	N	115.0	50/60	564HS	1177H05F000	
C-Band	1177H13F000	3.0-8.0	100	30	15.5 x 16.75 x 3.5	39.37 x 42.55 x 8.89	20.0	9.09	N	115.0	50/60	646H	1177H13F000	C-Band
	1177H16F000	3.9-11.7	100*	30*	15.5 x 16.75 x 3.5	39.37 x 42.55 x 8.89	20.0	9.09	N	115.0	50/60	664H	1177H16F000	
	1177H02F000	4.0-8.0	100	30	15.5 x 16.75 x 3.5	39.37 x 42.55 x 8.89	20.0	9.09	N	115.0	50/60	648H	1177H02F000	
	1277H02F000	4.0-8.0	200	30	15.5 x 16.75 x 3.5	39.37 x 42.55 x 8.89	20.0	9.09	N	115.0	50/60	640H	1277H02F000	
	1177H06F000	4.0-10.5	100	30*	15.5 x 16.75 x 3.5	39.37 x 42.55 x 8.89	20.0	9.09	N	115.0	50/60	648HS	1177H06F000	
	1177H14F000	5.0-10.0	100	30	15.5 x 16.75 x 3.5	39.37 x 42.55 x 8.89	20.0	9.09	N	115.0	50/60	746H	1177H14F000	
	1177H07F000	6.5-13.5	100	30	15.5 x 16.75 x 3.5	39.37 x 42.55 x 8.89	20.0	9.09	N	115.0	50/60	771HS	1177H07F000	
	1177H17F000	7.0-16.5	100	30	15.5 x 16.75 x 3.5	39.37 x 42.55 x 8.89	20.0	9.09	SMA	115.0	50/60	785H	1177H17F000	
X-Band	1177H03F000	8.0-12.4	100	30	15.5 x 16.75 x 3.5	39.37 x 42.55 x 8.89	20.0	9.09	N	115.0	50/60	771H	1177H03F000	X-Band
	1277H03F000	8.0-12.4	200	30	15.5 x 16.75 x 3.5	39.37 x 42.55 x 8.89	20.0	9.09	N	115.0	50/60	783H	1277H03F000	
	1177H15F000	8.0-18.0	100	30	15.5 x 16.75 x 3.5	39.37 x 42.55 x 8.89	20.0	9.09	SMA	115.0	50/60	846H	1177H15F000	
	1177H08F000	10.5-18.0	100	30	15.5 x 16.75 x 3.5	39.37 x 42.55 x 8.89	20.0	9.09	SMA or WR-62	115.0	50/60	848HS	1177H08F000	
Ku-Band	1177H04F000	12.4-18.0	100	30	15.5 x 16.75 x 3.5	39.37 x 42.55 x 8.89	20.0	9.09	SMA or WR-62	115.0	50/60	848H	1177H04F000	Ku-Band
	1277H04F000	12.4-18.0	200	30	15.5 x 16.75 x 3.5	39.37 x 42.55 x 8.89	20.0	9.09	WR-62	115.0	50/60	856H	1277H04F000	
K-Band	1077H11F000	18.0-26.5	10	30	15.5 x 16.75 x 3.5	39.37 x 42.55 x 8.89	20.0	9.09	WR-42	115.0	50/60	911H	1077H11F000	K-Band
Ka-Band	1077H12F000	26.5-40.0	10	30	15.5 x 16.75 x 3.5	39.37 x 42.55 x 8.89	20.0	9.09	WR-28	115.0	50/60	912H	1077H12F000	Ka-Band

Note: Each amplifier contains a PPM-focused, metal-ceramic TWT, all solid-state, air-cooled power supply in a 19-inch instrument case.

Options: Isolator/circulators, high gain, and automatic reset 220/240 ac or 28/48 dc input voltage, unattended protection, rack mounting, local/remote, 48 to 420 Hz, logic circuit (TTL).

Warranty: One year regardless of operating hours.

\* Slightly lower at band edges.

### Table I—KLYSTRONS

	Model Number	Frequency Range (GHz)	Minimum Power Output (kW)	Duty Cycle	Saturated Gain (dB)	Cathode Voltage Ek (kV)	Cathode Current Ik (A)	Dimensions L x W x H (Inches)	Dimensions L x W x H (cm)	Weight (lbs.)	Weight (kg)	Focusing	Modulation Control	Cooling	Model Number	
X-Band	173H	9.2-9.4	0.1	0.33	30.0	-3.0	0.15	5.0 x 3.5 x 3.5	12.7 x 8.89 x 8.89	4.5	2.05	PM	CP	L	173H	X-Band
	793H	9.2-9.4	0.1	0.33	40.0	-3.0	0.15	5.0 x 3.5 x 3.5	12.7 x 8.89 x 8.89	4.5	2.05	PM	CP	FA	793H	
	8710H	9.2-9.4	0.1	0.33	40.0	-3.0	0.15	5.0 x 3.5 x 3.5	12.7 x 8.89 x 8.89	4.5	2.05	PM	G	FA	8710H	
	8734H	9.2-9.4	0.1	0.5	30.0	-3.3	0.20	5.0 x 3.5 x 3.5	12.7 x 8.89 x 8.89	4.5	2.05	PM	G	C	8734H	
	173H Mod	10.0-10.25	0.2	CW	40.0	-3.6	0.22	6.0 x 4.0 x 4.0	15.24 x 10.16 x 10.16	5.0	2.27	PM	CP	FA	173H Mod	
Ku-Band	8702H	12.6-12.9	0.036	CW	40.0	-2.0	0.10	6.0 x 3.9 x 5.5	15.24 x 9.14 x 13.97	7.25	3.30	PM	CP	FA	8702H	Ku-Band

### SYMBOLS

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|------------------------|---------------------------------|
| A = mod anode          | L = liquid                      |
| AG = Aperture Grid     | PM = permanent magnet           |
| C = conduction         | PPM = periodic-permanent magnet |
| CP = cathode pulse     | SG = shadow grid                |
| FA = forced air        | Sol = solenoid                  |
| G = high mu grid       | V = vapor phase                 |
| IS = integral solenoid |                                 |



MICROWAVE PRODUCTS DIVISION