



H-Series

High Power / High Density RF Amplifiers

HR Model 19" Rack Mount

Model HR-Power Amplifier with optional integrated power supply in one small footprint.
Air / Water cooled.

Amplifier shown:

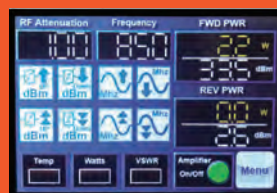
- 19" x 15" x 5.25"
- 2000 Watts
- 352 MHz
- 480 VAC / 3 phase



Front Panel Features:

- Gain Control
- VSWR Protection
- Voltage / Current Monitor
- Temp Monitor / Shutdown

500 Watts to 10 KW
2 MHz to 10 GHz
Air / Water cooled



Front touch panel control

**High
Reliability**

**Extremely
Rugged**

**Designed for
CW / Pulse
or Digital
Applications**



HM Model Modular High Power



Model HM-Power Amplifier with optional integrated power supply.
Water cooled.

Amplifier shown:

- 16" x 8" x 6"
- 2000 Watts
- 352 MHz
- 480 VAC / 3 phase

200 Watts to 2 KW
2 MHz to 10 GHz
Water cooled



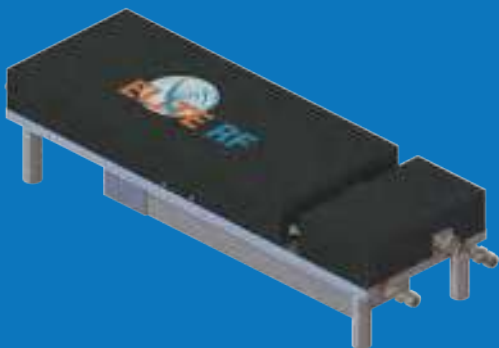
Model HM-Power Amplifier with optional low-profile integrated power supply in one small footprint.
Water cooled.

Amplifier shown:

- 16" x 8" x 3"
- 2000 Watts
- 352 MHz
- 480 VAC / 3 phase

Model	Frequency (MHz)	Power Out (watts)	Gain (dB)	*Voltage (Vdc)	System (watts)	Mode	Package
XX002030M5760-XX	2-30	500	60	28-65 Vdc/100-480 Vac	900	CW/Digital/Pulse	HM / HR
XX027027M5760-XX	27	500	60	28-65 Vdc/100-480 Vac	900	CW/Digital/Pulse	HM / HR
XX040042M5760-XX	40-42	500	60	28-65 Vdc/100-480 Vac	900	CW/Digital/Pulse	HM / HR
XX060060M5760-XX	60	500	60	28-65 Vdc/100-480 Vac	900	CW/Digital/Pulse	HM / HR
XX071073M5760-XX	71-73	500	60	28-65 Vdc/100-480 Vac	900	CW/Digital/Pulse	HM / HR
XX080082M5760-XX	80-82	500	60	28-65 Vdc/100-480 Vac	900	CW/Digital/Pulse	HM / HR
XX088108M5760-XX	88-108	500	60	28-65 Vdc/100-480 Vac	900	CW/Digital/Pulse	HM / HR
XX128128M5760-XX	128	500	60	28-65 Vdc/100-480 Vac	900	CW/Digital/Pulse	HM / HR
XX144148M5760-XX	144-148	500	60	28-65 Vdc/100-480 Vac	900	CW/Digital/Pulse	HM / HR
XX170230M5760-XX	170-230	500	60	28-65 Vdc/100-480 Vac	900	CW/Digital/Pulse	HM / HR
XX200200M5760-XX	200	500	60	28-65 Vdc/100-480 Vac	900	CW/Digital/Pulse	HM / HR
XX225235M5760-XX	225-235	500	60	28-65 Vdc/100-480 Vac	900	CW/Digital/Pulse	HM / HR
XX352352M5760-XX	352	500	60	28-65 Vdc/100-480 Vac	900	CW/Digital/Pulse	HM / HR
XX500500M5760-XX	500	500	60	28-65 Vdc/100-480 Vac	900	CW/Digital/Pulse	HM / HR
XX915915M5760-XX	915	500	60	28-65 Vdc/100-480 Vac	900	CW/Digital/Pulse	HM / HR
XX1.01.1G5760-XX	1000-1100	500	60	28-65 Vdc/100-480 Vac	900	CW/Digital/Pulse	HM / HR
XX1.21.4G5760-XX	1200-1400	500	60	28-65 Vdc/100-480 Vac	900	Pulse	HM / HR
XX1.31.3G5760-XX	1300	500	60	28-65 Vdc/100-480 Vac	900	CW/Digital/Pulse	HM / HR
XX2.42.5G5760-XX	2400-2500	500	60	28-65 Vdc/100-480 Vac	900	CW/Digital/Pulse	HM / HR
XX2.73.1G5760-XX	2700-3100	500	60	28-65 Vdc/100-480 Vac	900	Pulse	HM / HR
XX2.93.5G5760-XX	2900-3500	500	60	28-65 Vdc/100-480 Vac	900	Pulse	HM / HR
XX5.25.9G5760-XX	5200-5900	500	60	28-65 Vdc/100-480 Vac	900	Pulse	HM / HR

HM Model Modular High Power

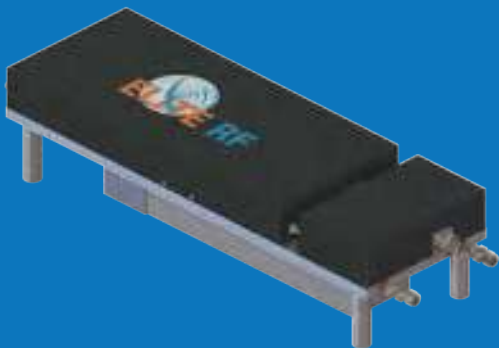


HR Model 19" Rack Mount



Model	Frequency (MHz)	Power Out (watts)	Gain (dB)	*Voltage (Vdc)	System (watts)	Mode	Package
XX002030M6060-XX	2-30	1000	60	28-65 Vdc/100-480 Vac	1800	CW/Digital/Pulse	HM / HR
XX027027M6060-XX	27	1000	60	28-65 Vdc/100-480 Vac	1800	CW/Digital/Pulse	HM / HR
XX040042M6060-XX	40-42	1000	60	28-65 Vdc/100-480 Vac	1800	CW/Digital/Pulse	HM / HR
XX060060M6060-XX	60	1000	60	28-65 Vdc/100-480 Vac	1800	CW/Digital/Pulse	HM / HR
XX071073M6060-XX	71-73	1000	60	28-65 Vdc/100-480 Vac	1800	CW/Digital/Pulse	HM / HR
XX080082M6060-XX	80-82	1000	60	28-65 Vdc/100-480 Vac	1800	CW/Digital/Pulse	HM / HR
XX088108M6060-XX	88-108	1000	60	28-65 Vdc/100-480 Vac	1800	CW/Digital/Pulse	HM / HR
XX128128M6060-XX	128	1000	60	28-65 Vdc/100-480 Vac	1800	CW/Digital/Pulse	HM / HR
XX144148M6060-XX	144-148	1000	60	28-65 Vdc/100-480 Vac	1800	CW/Digital/Pulse	HM / HR
XX170230M6060-XX	170-230	1000	60	28-65 Vdc/100-480 Vac	1800	CW/Digital/Pulse	HM / HR
XX200200M6060-XX	200	1000	60	28-65 Vdc/100-480 Vac	1800	CW/Digital/Pulse	HM / HR
XX225235M6060-XX	225-235	1000	60	28-65 Vdc/100-480 Vac	1800	CW/Digital/Pulse	HM / HR
XX352352M6060-XX	352	1000	60	28-65 Vdc/100-480 Vac	1800	CW/Digital/Pulse	HM / HR
XX500500M6060-XX	500	1000	60	28-65 Vdc/100-480 Vac	1800	CW/Digital/Pulse	HM / HR
XX915915M6060-XX	915	1000	60	28-65 Vdc/100-480 Vac	1800	CW/Digital/Pulse	HM / HR
XX1.01.1G6060-XX	1000-1100	1000	60	28-65 Vdc/100-480 Vac	1800	CW/Digital/Pulse	HM / HR
XX1.21.4G6060-XX	1200-1400	1000	60	28-65 Vdc/100-480 Vac	1800	Pulse	HM / HR
XX1.31.3G6060-XX	1300	1000	60	28-65 Vdc/100-480 Vac	1800	CW/Digital/Pulse	HM / HR
XX2.42.5G6060-XX	2400-2500	1000	60	28-65 Vdc/100-480 Vac	1800	CW/Digital/Pulse	HM / HR
XX2.73.1G6060-XX	2700-3100	1000	60	28-65 Vdc/100-480 Vac	1800	Pulse	HM / HR
XX2.93.5G6060-XX	2900-3500	1000	60	28-65 Vdc/100-480 Vac	1800	Pulse	HM / HR
XX5.25.9G6060-XX	5200-5900	1000	60	28-65 Vdc/100-480 Vac	1800	Pulse	HM / HR

HM Model Modular High Power



HR Model 19" Rack Mount



Model	Frequency (MHz)	Power Out (watts)	Gain (dB)	*Voltage (Vdc)	System (watts)	Mode	Package
XX002030M6360-XX	2-30	2000	60	28-65 Vdc/100-480 Vac	3500	CW/Digital/Pulse	HM / HR
XX027027M6360-XX	27	2000	60	28-65 Vdc/100-480 Vac	3500	CW/Digital/Pulse	HM / HR
XX040042M6360-XX	40-42	2000	60	28-65 Vdc/100-480 Vac	3500	CW/Digital/Pulse	HM / HR
XX060060M6360-XX	60	2000	60	28-65 Vdc/100-480 Vac	3500	CW/Digital/Pulse	HM / HR
XX071073M6360-XX	71-73	2000	60	28-65 Vdc/100-480 Vac	3500	CW/Digital/Pulse	HM / HR
XX080082M6360-XX	80-82	2000	60	28-65 Vdc/100-480 Vac	3500	CW/Digital/Pulse	HM / HR
XX088108M6360-XX	88-108	2000	60	28-65 Vdc/100-480 Vac	3500	CW/Digital/Pulse	HM / HR
XX128128M6360-XX	128	2000	60	28-65 Vdc/100-480 Vac	3500	CW/Digital/Pulse	HM / HR
XX144148M6360-XX	144-148	2000	60	28-65 Vdc/100-480 Vac	3500	CW/Digital/Pulse	HM / HR
XX170230M6360-XX	170-230	2000	60	28-65 Vdc/100-480 Vac	3500	CW/Digital/Pulse	HM / HR
XX200200M6360-XX	200	2000	60	28-65 Vdc/100-480 Vac	3500	CW/Digital/Pulse	HM / HR
XX225235M6360-XX	225-235	2000	60	28-65 Vdc/100-480 Vac	3500	CW/Digital/Pulse	HM / HR
XX352352M6360-XX	352	2000	60	28-65 Vdc/100-480 Vac	3500	CW/Digital/Pulse	HM / HR
XX500500M6360-XX	500	2000	60	28-65 Vdc/100-480 Vac	3500	CW/Digital/Pulse	HM / HR
XX915915M6360-XX	915	2000	60	28-65 Vdc/100-480 Vac	3500	CW/Digital/Pulse	HM / HR
XX1.01.1G6360-XX	1000-1100	2000	60	28-65 Vdc/100-480 Vac	3500	CW/Digital/Pulse	HM / HR
XX1.21.4G6360-XX	1200-1400	2000	60	28-65 Vdc/100-480 Vac	3500	Pulse	HM / HR
XX1.31.3G6360-XX	1300	2000	60	28-65 Vdc/100-480 Vac	3500	CW/Digital/Pulse	HM / HR
XX2.42.5G6360-XX	2400-2500	2000	60	28-65 Vdc/100-480 Vac	3500	CW/Digital/Pulse	HM / HR
XX2.73.1G6360-XX	2700-3100	2000	60	28-65 Vdc/100-480 Vac	3500	Pulse	HM / HR
XX2.93.5G6360-XX	2900-3500	2000	60	28-65 Vdc/100-480 Vac	3500	Pulse	HM / HR
XX5.25.9G6360-XX	5200-5900	2000	60	28-65 Vdc/100-480 Vac	3500	Pulse	HM / HR

Part Numbering System

<u>XX</u>	<u>XXX</u>	<u>XXX</u>	<u>X</u>	<u>XX</u>	<u>XX -</u>	<u>X</u>	<u>X</u>
Model	Min	Max	Units	Power	Gain	Voltage	Cooling
HM - Module	Freq.	Freq.	M - MHz	dBm	dB	1 - 28 Vdc	A - Air
HR - 19" Rack	Freq.	Freq.	G - GHz	dBm	dB	2 - 50 Vdc	L - Liquid
						3 - 65 Vdc	
						4 - 100 - 240 Vac	
						5 - 208 / 3 phase	
						6 - 480 / 3 phase	

Notes:

1. Not all voltages are available for all models-check with factory
2. HM Series requires water cooling
3. For power levels above 2 KW contact the factory

HS-Series RF Amplifier Systems use HR and HM amplifiers to provide kilo-watt power in a small footprint. These 19" rack systems are designed for high reliability and are extremely rugged. HS-Series is designed for CW / Pulse or digital applications.

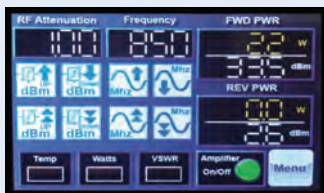
HS Model - 19" Rack Mount System

System shown:

- 19" x 24"- 42 U
- 10 KW
- 117 MHz
- 220 VAC / 3 phase

5 kW Watts to 200 kW**2 MHz to 10 GHz****Air / Water Cooled****System shown:**

- 19" x 24"- 42 U
- 30 KW
- 352 MHz
- 480 VAC / 3 phase

**Front Panel Features:**

- Gain Control
- VSWR Protection
- Voltage / Current Monitor
- Temp Monitor / Shutdown

Patent Pending
Power Amplifier System
with optional
Hot-Swap
technology
(both power amp
& power supply)



Model	Frequency (MHz)	Power Out (watts)	Gain (dB)	*Voltage (Vdc)	System (watts)	Mode	Package
HS002030M6360-XX	2-30	10,000	60	100-480 Vac	20,000	CW/Digital/Pulse	HS
HS027027M6360-XX	27	10,000	60	100-480 Vac	20,000	CW/Digital/Pulse	HS
HS040042M6360-XX	40-42	10,000	60	100-480 Vac	20,000	CW/Digital/Pulse	HS
HS060060M6360-XX	60	10,000	60	100-480 Vac	20,000	CW/Digital/Pulse	HS
HS071073M6360-XX	71-73	10,000	60	100-480 Vac	20,000	CW/Digital/Pulse	HS
HS080082M6360-XX	80-82	10,000	60	100-480 Vac	20,000	CW/Digital/Pulse	HS
HS088108M6360-XX	88-108	10,000	60	100-480 Vac	20,000	CW/Digital/Pulse	HS
HS128128M6360-XX	128	10,000	60	100-480 Vac	20,000	CW/Digital/Pulse	HS
HS144148M6360-XX	144-148	10,000	60	100-480 Vac	20,000	CW/Digital/Pulse	HS
HS170230M6360-XX	170-230	10,000	60	100-480 Vac	20,000	CW/Digital/Pulse	HS
HS200200M6360-XX	200	10,000	60	100-480 Vac	20,000	CW/Digital/Pulse	HS
HS225235M6360-XX	225-235	10,000	60	100-480 Vac	20,000	CW/Digital/Pulse	HS
HS352352M6360-XX	352	30,000	60	100-480 Vac	50,000	CW/Digital/Pulse	HS
HS500500M6360-XX	500	30,000	60	100-480 Vac	50,000	CW/Digital/Pulse	HS
HS915915M6360-XX	915	10,000	60	100-480 Vac	20,000	CW/Digital/Pulse	HS
HS1.01.1G6360-XX	1000-1100	10,000	60	100-480 Vac	20,000	CW/Digital/Pulse	HS
HS1.21.4G6360-XX	1200-1400	10,000	60	100-480 Vac	20,000	Pulse	HS
HS1.31.3G6360-XX	1300	10,000	60	100-480 Vac	20,000	CW/Digital/Pulse	HS
HS2.42.5G6360-XX	2400-2500	10,000	60	100-480 Vac	20,000	CW/Digital/Pulse	HS
HS2.73.1G6360-XX	2700-3100	10,000	60	100-480 Vac	20,000	Pulse	HS
HS2.93.5G6360-XX	2900-3500	10,000	60	100-480 Vac	20,000	Pulse	HS
HS5.25.9G6360-XX	5200-5900	10,000	60	100-480 Vac	20,000	Pulse	HS

Part Numbering System

<u>XX</u>	<u>XXX</u>	<u>XXX</u>	<u>X</u>	<u>XX</u>	<u>XX</u> -	<u>X</u>	<u>X</u> -	<u>X</u>
Model	Min	Max	Units	Power	Gain	Voltage*	Cooling	Hot Swap
HS	Freq.	Freq.	M - MHz	dBm	dB	1 - 100 - 240 Vac	A - Air	S
HR - 19" Rack	Freq.	Freq.	G - GHz	dBm	dB	2 - 208 / 3 phase	L - Liquid	
						3 - 480 / 3 phase		

Notes:

1. Not all voltages are available for all models- check with factory
2. Not all models have air cooling options- check with factory
3. For power levels above 50 KW contact the factory