

Compact C- Band 10 kW / High Power Amplifier

Model – HP5.65.7G7070AC-W

Industry leading compact design / 24" x 24" x 14"



10 kW watts Pk 5.6 to 5.7 GHz 180- 264 VAC

General Description:

Elite RF's HP Series amplifier is a Narrowband power amplifier designed for pulsed signals fabricated on GaN process and can operate up to **5700 MHz**. These amplifiers offer high power density, low thermal resistance, and rugged performance. They can be widely used for military and commercial applications.

Like all Elite RF amplifiers, this product comes with an industry leading warranty.

Features

- 10KW Pk. Output Power
- Fwd/Rev power monitor
- Current/temp of each module
- Forward power sample port
- RS422 control
- Gate trigger input
- Protection Alarms
- System interlock
- Water cooled
- Air cooled options available

Protections

- Thermal shutdown at 85 deg C
- VSWR shutdown at 3:1
- Duty cycle shutdown at > 10%
- Pulse width shutdown at > 100 usec
- Forward power shutdown at 10.5 KW
- System alarms

ELECTRICAL SPECIFICATIONS

Parameter	Symbol	Min	Typ	Max	Unit
Frequency Range	BW	5600		5700	MHz
Output Power Pk	Psat	9.5	10.0		kW
Pulse Drop	Pd		0.5	1.0	dB
Small Signal Gain	Gp	72	75		dB
Gain Flatness	Delta Gp 1		+/- .5	+/- 1	dB
Input VSWR	S11		2:1		Ratio
Duty Cycle	DC		5	10	%
Harmonics	H		-40		dBc
Spurious Signals	Spur		-60		dBc
AC Operating Voltage / 50- 60 Hz	Opv	180	220	264	VAC
AC Avg Power at 10 kW PK / 10% DC	Pd		2500	3000	Watt
Pulse rise and fall time	Prf			200	nsec
Pulse Width	PW		10	100	usec
Power Gain	Lsg	70	73		dB
Max Load VSWR @ 10kW Pk	ML			3:1	Ratio

ENVIRONMENTAL CHARACTERISTICS

Parameter	Symbol	Min	Typ	Max	Unit
Operating Temperature	Tc	0		+50	Deg. C
Storage Temperature	Tstg	-40		+85	Deg. C
Relative Humidity (non-condensing)	RH			95	%
Altitude	ALT			10,000	Feet
Vibration/Shock	VI /SH				Normal Truck Transport

MECHANICAL CHARACTERISTICS

Parameter	Symbol	Min	Typ	Max	Unit
Dimensions	Dim		24 x 24 x 14		Inches
Weight	Wt.		210		lbs.
Connectors In/Out	RF Conn		N-Type / WR187		-
Cooling	Th		Water cooling		-

OPTIONS

Parameter	Add suffix to part number
Heat sink and fans	N/A
Isolator with forward and reverse voltage outputs	N/A
TTL Input Trigger	N/A

Mechanical Drawings

