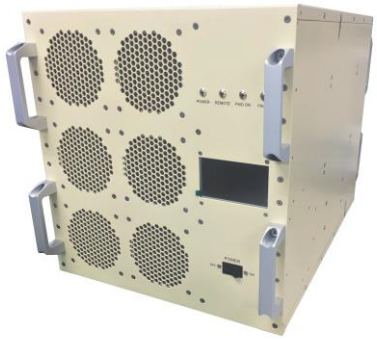
HD32091
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Rack mounted system
Class AB linear GaN design
Instantaneous wide bandwidth
Suitable for high power - L-Band long pulse applications
Built-in control, monitoring and protection circuits
Versatile interface options
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS

Parameter	Specification			Notes
Operating Frequency Range	1000 - 2000 MHz			
Peak Output Power	10,000 Watt Min			Into 50 Ω
Power Gain	70 dB Min			Pin=0dBm for full rated Pout
Power Gain Flatness	+1.5 / -0 dB Max			Constant input power
Pulse Characteristics	**Width**	**Duty Cycle**	**PRF**	
	4 - 650 µS	15 % Max		
Input Return Loss	-12 dB Max			Relative to 50 Ohm
Harmonics	-20 dBc Max			At rated output
Spurious	-60 dBc Max			Non-harmonics
Noise Quieting	-80 dBm/MHz Max			
Operating Voltage	208 VAC, ±10 %, 50-60 Hz ±10 %			3-Phase
Efficiency	>10 %			At rated Pout
Max Input Power Protection	+3 dBm			Without damage for 1 min Nominal input for rated output is 0dBm
Load VSWR Protection	∞ : 1 @ rated Pout			Without damage for 10 Sec. System will shutdown when greater than 3:1 VSWR is detected

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Ambient Temperature	0 to +50 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non-condensation
Altitude Operating / Storage	2500 meter Min	
Shock	MIL-STD-810F, Method 516.5	Shocks: Proc. I, 11msec, 18 sawtooth pulses with peak value of 20 g.
Vibration	MIL-STD-810F, Method 514.5	Cat. 20, fig. 514.5C-1 tailored for installation within off-road wheeled vehicle. Test duration is 3 hours per axis.
Transportation	MIL-STD-810F, Method 514.5	Cat. 5. Test duration is 3 hours.

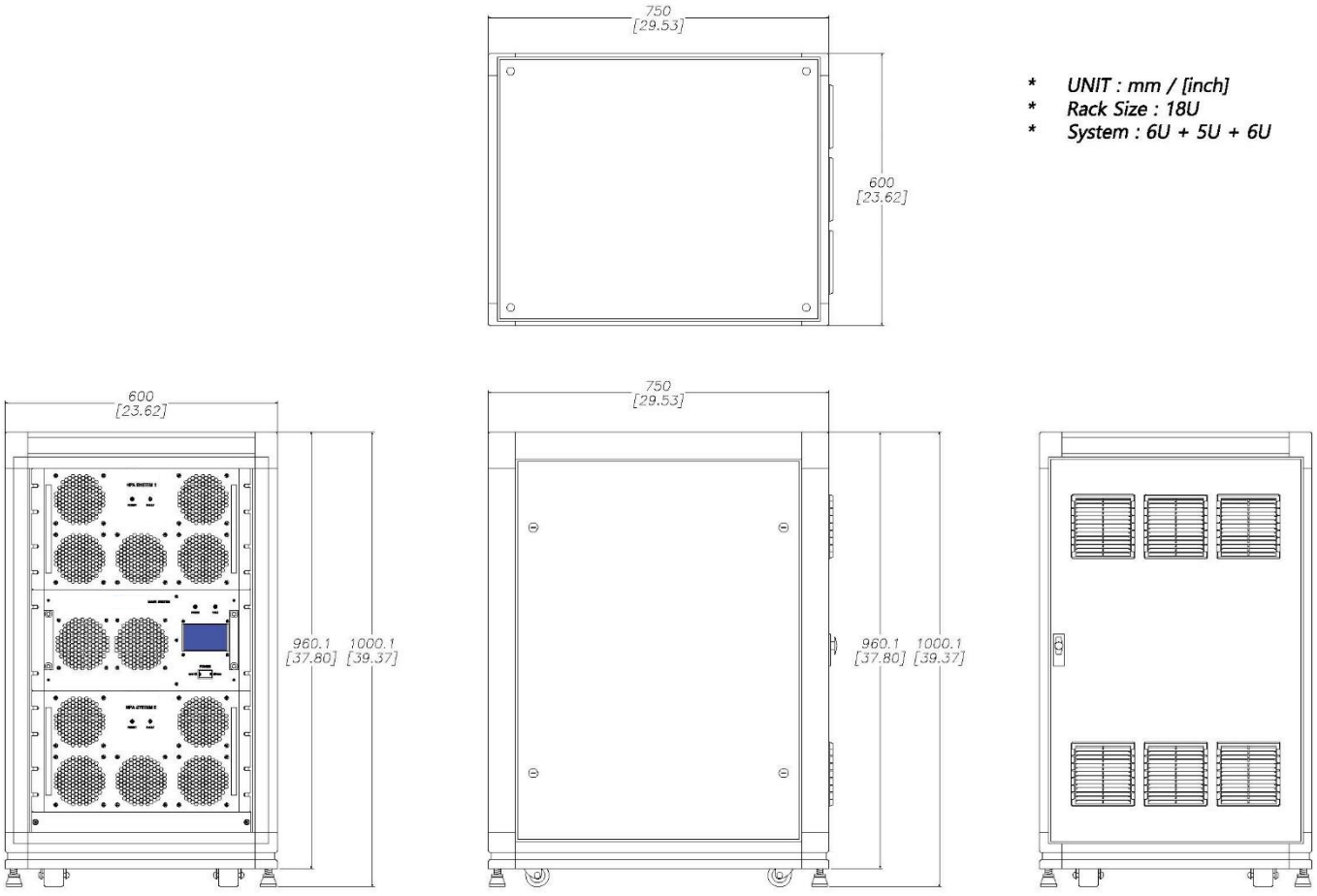
332C Dante Ct. Holbrook, NY 11741 Phone: 631-588-3877 Fax: 631-648-0518
www.rfcomp.com www.rfamplifiers.com sales@hdcom.com

HD32091
SOLID STATE HIGH POWER AMPLIFIER

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions W x H x D	Rack mounted cabinet	Per outline drawing
Weight	-	
RF Connectors Input / Output	Type-N Female / SC female	Rear Panel
AC Power Connector	MS3102A24-10P	Rear panel, or equivalent
GPIB / Remote Connectors	3549-1002 / MS3102A16S-1S	Rear panel, or equivalent
Noise Quieting connector	TNC female	
Cooling	Built in Fan Cooling	Variable speed
OPTIONAL: Digital Monitor & Control FWD, REV, VSWR, GAIN, ALC, V & I, TEMP	Ethernet RJ-45 TCP/IP, RS232/RS422/485 Optional GPIB IEEE	Rear panel

OUTLINE DRAWING



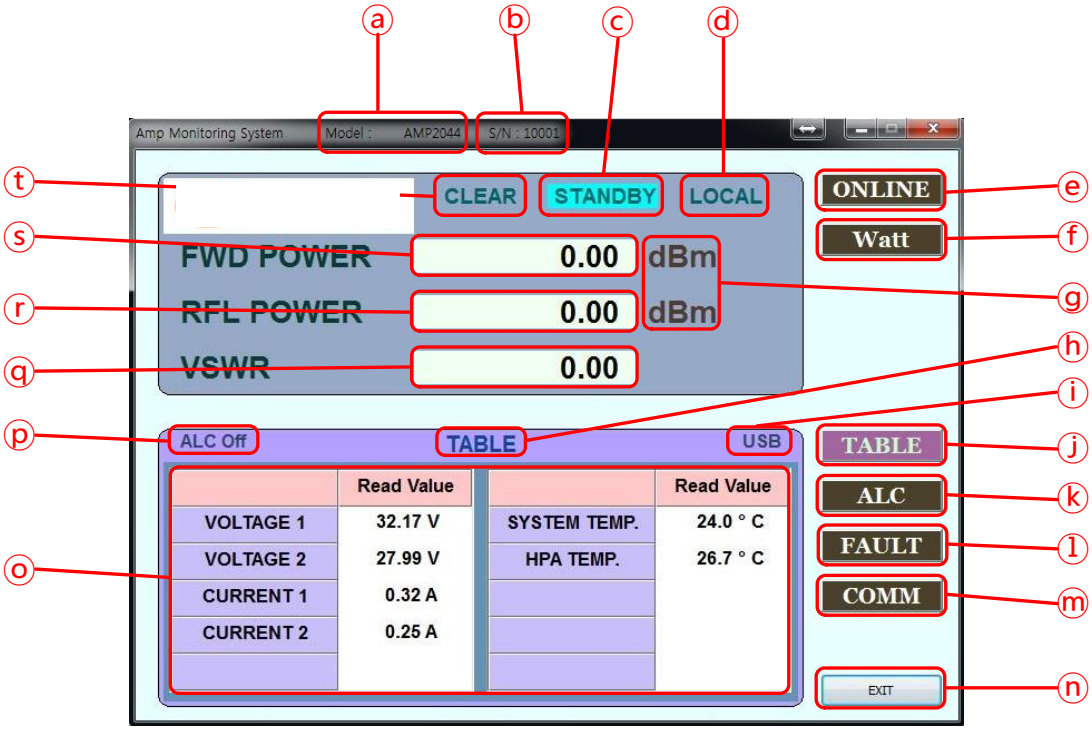
* *UNIT : mm / [inch]*
* *Rack Size : 18U*
* *System : 6U + 5U + 6U*

332C Dante Ct. Holbrook, NY 11741 Phone: 631-588-3877 Fax: 631-648-0518
www.rfcomp.com www.rfamplifiers.com sales@hdcom.com

HD32091
SOLID STATE HIGH POWER AMPLIFIER

Communications Corp.

CONTROLLER - PRIMARY (MAIN) WINDOW



a Model: Connected model number.
b S/N: Serial number of the connected model.
c STANDY/ONLINE: Display system STANDY/ONLINE status.
d LOCAL/REMOTE: Display system LOCAL/REMOTE status, REMOTE mode is optional.
e ONLINE/STANDY: System ONLINE/STANDY button.
f Watt/dBm: Watt/dBm conversion button.
g dBm/Watt: Display dBm/Watt status.
h TABLE/ALE/FAULT/COMM: Display menu status.
i RS232 (RS422)/USB/BLUETOOTH/ETHERNET: Display the communication mode.
j TABLE: TABLE menu button.
k ALC: ALC menu button.
l FAULT: FAULT menu button.
m COMM: COMM menu button.
n EXIT: Button to exit the program.
o Display status of the TABLE menu window.
p ALC On/ALC Off: Display ALC operating status.
q VSWR: Display VSWR value.
r RFL POWER: Display RFL POWER value.
s FWD POWER: Display FWD POWER value.
t CLEAR/FALUT: Display CLEAR/FAULT status.

332C Dante Ct. Holbrook, NY 11741 Phone: 631-588-3877 Fax: 631-648-0518
www.rfcomp.com www.rfamplifiers.com sales@hdcom.com