HD32107
12KW HIGH POWER PULSE SOLID STATE AMPLIFIER

HD Communications Corp.



FEATURES

Small form factor rack cabinet system
High power LDMOS pulse devices
Instantaneous bandwidth
Suitable for high power linear pulse applications
Built-in protection circuits
High reliability and ruggedness
System comprises: x8 phase/amplitude matched 1.6KW pulse modules to produce 12KW typical power.

ELECTRICAL SPECIFICATIONS: 50Ω, 25°C

Parameter	Specification			Notes
Operating Frequency Range	2.7 - 2.9 GHz			
Peak Output Power	12 KW Typ. 10KW Min			@ 10 % Duty Cycle
Output Power Flatness	2 dB p-p Max			
Input Power	0 dBm Nom			
Saturated Gain	70 dB Min			
Pulse Characteristics	**Width**	**Duty**	**PRF**	
	200 µS Max	10 % Max	500 Hz Nom	
Rise / Fall Time	<150 nSec			
Droop	<0.8 dB			@ PW = 100 µS
Input / Output VSWR	1.5 : 1 Min			
Harmonics	-30 dBc Max			At rated Output Power
Spurious	-65 dBc Max			Non-harmonics
Load VSWR Protection	5 : 1 Max			No damage
Input power Protection	+5 dBm Max			Input limiter
AC Input Voltage	220 VAC Nom, 50/60 Hz			
Efficiency	20 % Typ			

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Ambient Temperature	0 to +50°C	
Storage Temperature	-20 to +70°C	
Relative Humidity	95% Max @ 40°C	Non-condensing
Altitude	5160 m Max	

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions W x H x D	600 x 1414 x 750 mm	27U
Weight	250 Kg. Nom	
RF Connectors In / Out	Type-N Female / CPR284F Waveguide	Rear panel
Driver Input Connector	BNC Female	Rear Panel
RF Output Monitoring - Coupled Port	N Female	60dB ±1dB Nom
AC Power	MS Connector	Rear panel
AC Power Switch	Circuit Breaker - LED	Front panel
Interface Connector	9-Pin D-Sub	
Cooling	Built in Fan Cooling	

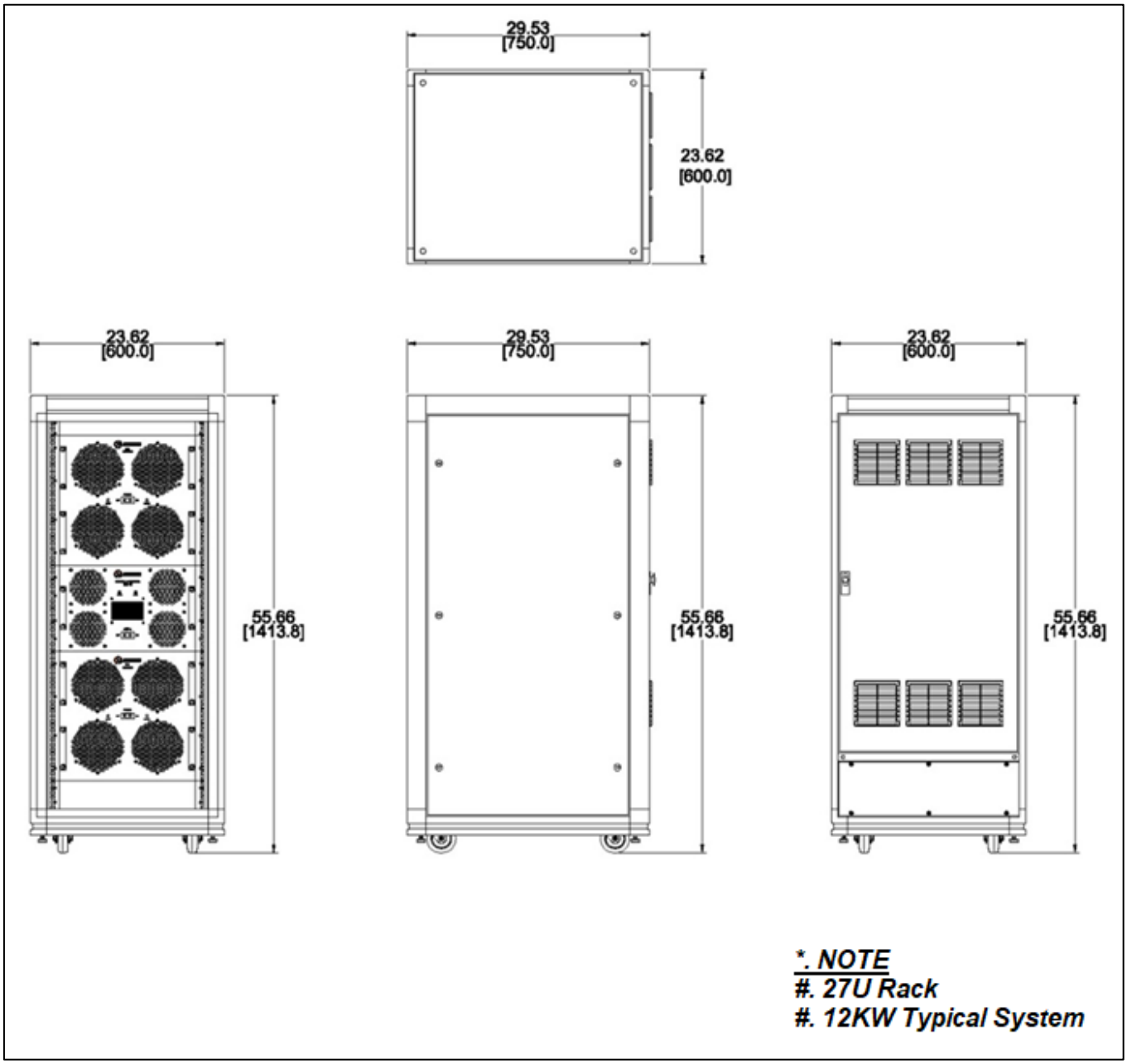
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PROTECTIONS

Parameter	Specification	Notes
General Protection	AC overload, Over temperature, Load VSWR	
Pulse protection	Pulse width, Duty cycle	

OUTLINE DRAWING

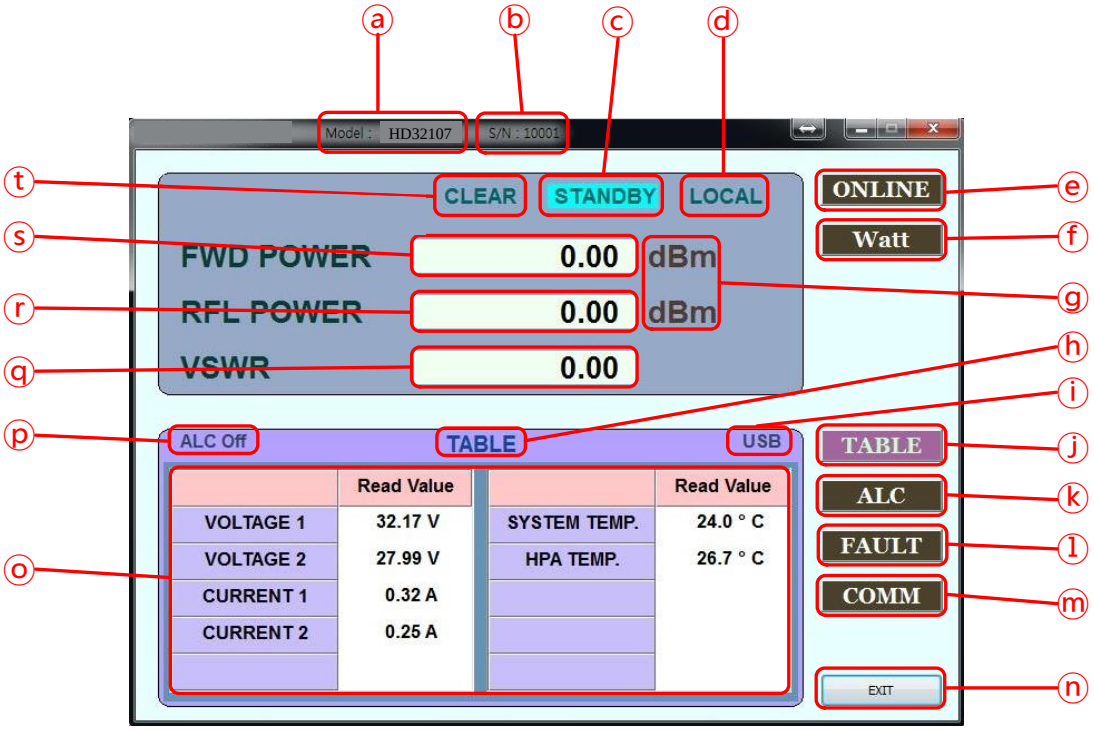


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CONTROLLER - PRIMARY (MAIN) WINDOW



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.

- *A GUI is included should the customer require for their planned application.*

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