

# GaN Power Amplifier DM-HPX-30-101

## Electrical Specifications (-40°C to +85°C)

PARAMETER	UNITS
Frequency	9.75 to 10.25 GHz
Small Signal Gain	50 dB min
Gain Var. Over Temp	-0.05 dB/°C typical
Psat @ 5dBm Input	50 dBm min
Psat @ 5dBm Input	120 W typical
Noise Figure	8 dB max
DC Voltage	40 VDC
VSWR (Input/Output)	2.0:1 nom
PAE	30 % typical
Spurious	-70 dBc typical
Input Power Handling	+15 dBm max
Mismatch Handling	5.0:1 max
Operation	Pulse, 100 $\mu$ s, 10% d.c.

## Mechanical Specifications

PARAMETER	UNITS
Size (L x W x H)	3.6" x 3.4" x 1"
Connectors (In/Out)	SMA (f)/N (f)
Sealing	Hermetic
Finish	Grey Paint, Mounting surface Ni finish
Marking	Black per MIL-STD-130
Cooling	External heatsink

## Features

PARAMETER	UNITS
DC On/Off	500ns; TTL Logic-Low "0V": ON; High "5V": OFF
Over Temp Shutdown	at +90°C
Current Monitoring	Included

## Environmental Specifications (by design)

PARAMETER	UNITS
Operating Temperature	-40 to +70°C
Storage Temperature	-54 to +85°C
Relative Humidity	IAW MIL-STD-810F, up to 95%
Altitude	up to 30,000 ft
Shock	IAW MIL-STD-202G method 214, condition C
Fungus	IAW MIL-STD-810G method 508.6

## Classification

ECCN: EAR99

## Test Data

Gain, Output Power, and DC Power at +25°C