

# Part Number DM-HPKU-20-102

## GaN Power Amplifier

Rev 2  
4/8/2016

### Electrical Specifications (+25°C):

Frequency:	14.85 to 15.35 GHz
Small Signal Gain:	45 dB min
Gain Var. Over Temp	-0.05 dB/°C typical
Psat @ 5dBm Input:	41 dBm min
Psat @ 5dBm Input:	16 W typical
P1dB:	39 dBm min
Noise Figure:	7 dB max
DC Power:	28 VDC, 3.5 A nom at Psat
PAE:	20 % typical
VSWR (Input/Output):	2.0:1/2.0:1 nom
Harmonics:	-15 dBc typical @ Psat
Spurious:	-70 dBc typical
Input Power Handling:	15 dBm max
Mismatch Handling:	5.0:1 max
Operation:	CW
AM-PM Conversion:	4°/dB up to 40dBm max

### Features:

DC On/Off:	1µs; TTL Logic-Low "0V": ON; High "5V": OFF
Over Temp Shutdown:	at +90°C
Current Monitoring:	Included

### Mechanical Specifications:

Size (L x W x H):	2.5 x 2.75 x 0.45 inches
Connectors (In/Out):	SMA (f)/SMA (f)
Sealing:	Hermetic
Finish:	Grey Paint, Mounting surface Ni finish
Marking:	Black per MIL-STD-130
Cooling:	External heatsink
Outline:	001-0013

### Classification:

ECCN:	EAR99
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## Delta Microwave

300 Del Norte Blvd.  
Oxnard, CA. 93030

Phone: 805.751.1100  
Fax: 805.240.9544

email: sales@deltamicrowave.com  
www.deltamicrowave.com

Delta Microwave's Quality Management System has been assessed by NSF-ISR and found to be in conformance with AS9100:2009, Rev. C. Delta Microwave reserves the right to change specifications without notice. Please verify specification revision upon order placement.



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## Environmental Specifications (by design):

Operating Temperature:	-40 to +85°C
Storage Temperature:	-54 to +85°C
Relative Humidity:	IAW MIL-STD-810F, up to 95%
Altitude:	up to 30,000 ft
Vibration:	IAW MIL-STD-810F, Method 514.5, Table 514.5-I,
Shock:	IAW MIL-STD-202G method 214, condition C
Salt Fog:	5%, +35°C 96 hrs IAW MIL-STD- 810G method
Fungus:	IAW MIL-STD-810G method 508.6

## Test Data:

Gain, Psat, VSWR, DC Power at +25°C



Registered  
to AS9100  
(with ISO 9001)

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