

## 1GHz Ultra-Miniature Logarithmic Amplifier

750 MHz to 1250 MHz

Log Linearity at  
1000 MHz +/-1.0dB

Linearity over Temperature  
and Frequency +/- 2.0dB max



The Pascall Ultra-Miniature series of Logarithmic Amplifiers provide broadband performance and superb linearity over a wide temperature range. The UMLA 1-500 extends the existing range to 1 GHz centre frequency with broadband 500 MHz performance.

The UMLA ranges of logarithmic amplifiers are robustly constructed in lightweight aluminium alloy housings and are designed to withstand harsh mechanical environments.

This range is specified for operation over a case temperature range of -45°C to +85°C.

Supply voltage options are +/- 12 Volts and +/- 15 Volts with a total dc input power of 2.25 Watts.

The small size and weight makes these units an ideal choice for compact airborne equipment designs where low power dissipation is vital to maintain high reliability and performance.

Pascall has a large range of alternative logarithmic amplifiers covering centre frequencies from 10 MHz to 1 GHz and is also able to design models to meet customers' specific requirements.

# 1GHz Ultra-Miniature Logarithmic Amplifier

## UMLA 1-500

## DATA

Frequency Range	750 - 1250 MHz
Dynamic Range	-65 to 0dBm min
Linearity	+/- 1.0dB
Over Frequency @ 25°C	+/- 2.0dB max
Over Frequency and Temp	+/- 5% max
Variation of Log Slope (over freq and temp -45 to +85°C)	+/- 30mV max
Variation of Log Output (over freq and temp -45 to +85°C)	1.5V nominal
Video Output @ 0dBm	15mV / dB nominal
Log Slope	+/- 100mV min
Optional Electronic Offset Adjust	<10ns
Pulse Rise Time	<35ns
Pulse Fall Time	2 : 1 max
Input VSWR	+12V or +15 Volts @ 25mA
Power Supply	-12V or -15Volts @ 75mA
Size	63.5 x 25.4 x 10.3mm
Weight	28g
Connectors	SMA
Case Temperature Range (operating)	*-45 to +85°C
(storage)	-55 to +100°C

\*option available

## Ordering Information

## UMLA -1-500-AXX

Temp. Range 1 = 0 to 60°C

2 = -45 to +85°C

Supply Volts 1 = ±12V

2 = ±15V

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The right is reserved to amend the specifications of the products without notice

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