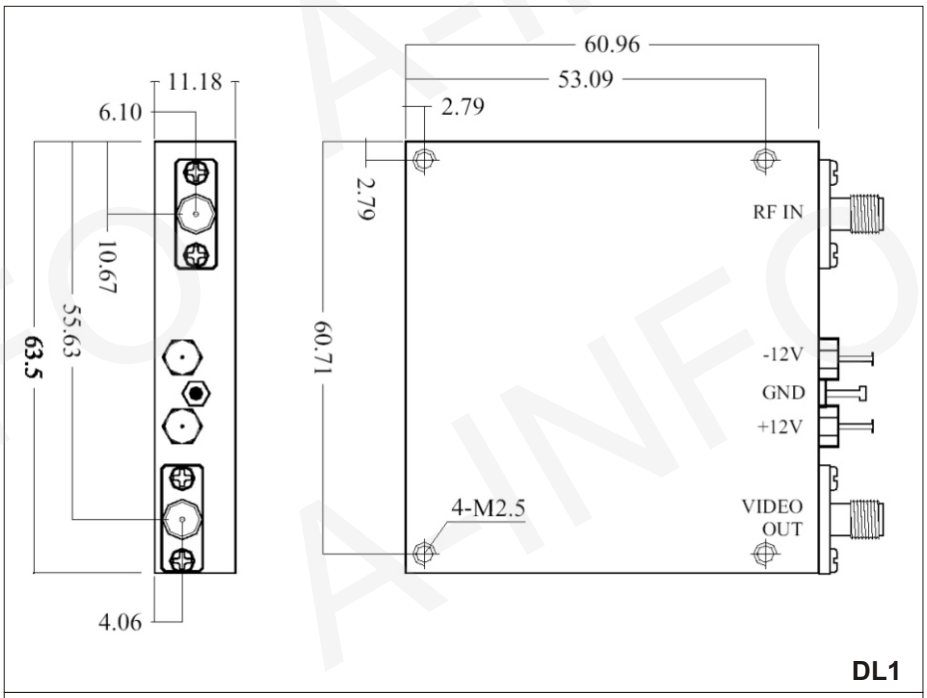
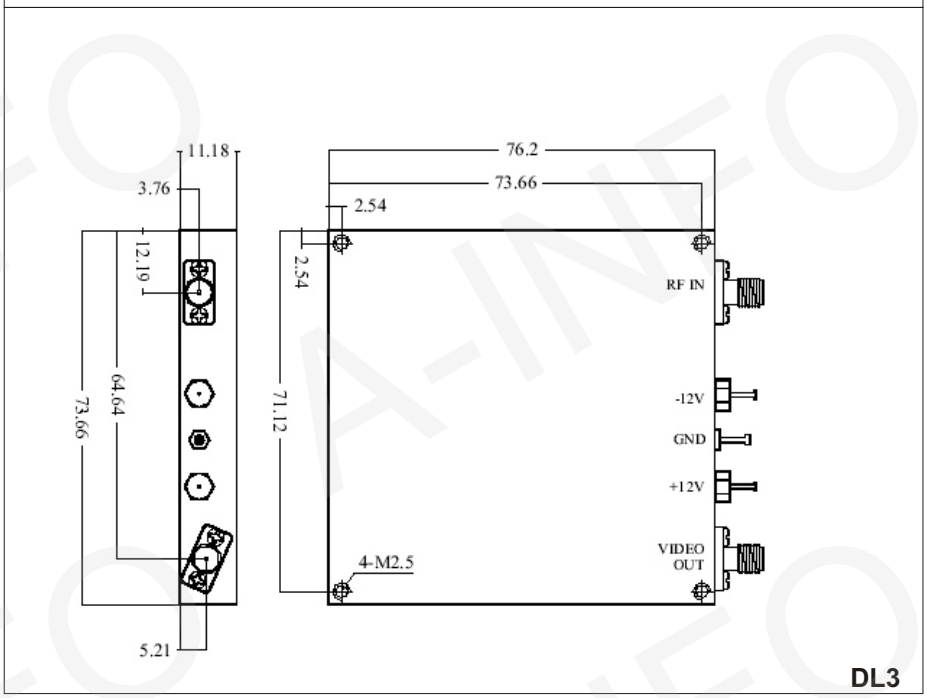
DLVA

Outline Drawings(Size: mm)



DL1



DL3

Terms and Definitions

Operational Bandwidth is the range of input frequency over which the technical specifications of the amplifier are met.

Log Slope is the straight line slope of the input/output transfer characteristics of the detected signal over the dynamic range. The log slope is expressed in millivolts per dB of a best-fit straight line as derived by a least-squares approximation of all data points

Log Linearity is the maximum deviation in dB of all measured points from the calculated best-fit straight line. The dynamic range can be as high as 75dB, depending upon

Dynamic Range is the range of the input signals in dB over which the output linearity requirement is met.

Maximum Input Power is the maximum power that the logarithmic amplifier can withstand without damage.

DC offset is the residual DC output of a logarithmic amplifier when the input is terminated with 50ohm.

Tangential Signal Sensitivity (TSS) defines the input level that results in an output signal-to-noise ratio of 6 dB. TSS, which is directly related to noise figure and bandwidth, aids in defining the lower limit of the input dynamic range of a logarithmic amplifier. TSS is also a convenient way of specifying a logarithmic amplifier's noise performance, since noise

Rise Time is defined as the time difference between the 10% point and 90% point on the rising leading edge of the output video pulse.

Recovery Time for a logarithmic amplifier is defined in many ways by system engineers. The most common is to use multiple pulses and characterize the time between the 90% point on the trailing edge of the first pulse and the 10% point on the leading edge of the