

transimpedance amplifier

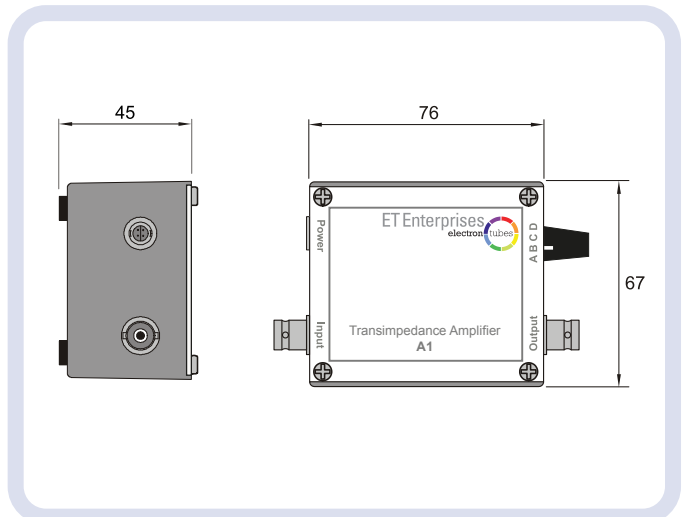
A1 data sheet

1 description

The A1 amplifier is an inverting FET transimpedance amplifier designed for use in photomultiplier applications where the anode signal response time is greater than 20ns. The A1 effectively transforms the high impedance output of the PMT to a low impedance output suitable for line driving to other measuring equipment.

The amplifier is provided with four conversion gains from 1mV/ μ A to 1V/ μ A selected via a rotary gain switch. A low impedance output driver provides sufficient current to drive a full 10V into 1k Ω or 5V into 50 Ω .

The unit is housed in a small metal box and may be powered from the auxiliary LV output of the ET Enterprises photomultiplier power supply HVLAB3000.



2 specification

range	mV/ μ A	rise time	bandwidth
A	1	20 ns	17.5 MHz
B	10	200 ns	1.75 MHz
C	100	2 μ s	175 kHz
D	1000	20 μ s	17.5 kHz

noise output: 1 mV p-p (range D)
10 V max into 1k Ω *
5 V max into 50 Ω *

power requirements: +15V at 100 mA
-15 V at 100 mA

weight: 200 g

*Can be operated from \pm 12V with a slightly reduced output voltage.

3 connections

Signal Input and Output
Power Input

Pin
1
2
3
4

50 Ω BNC Socket
4 Pin Lemo series 1
Function
+15V in
-15V in
not connected
0V

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