

# transimpedance amplifier

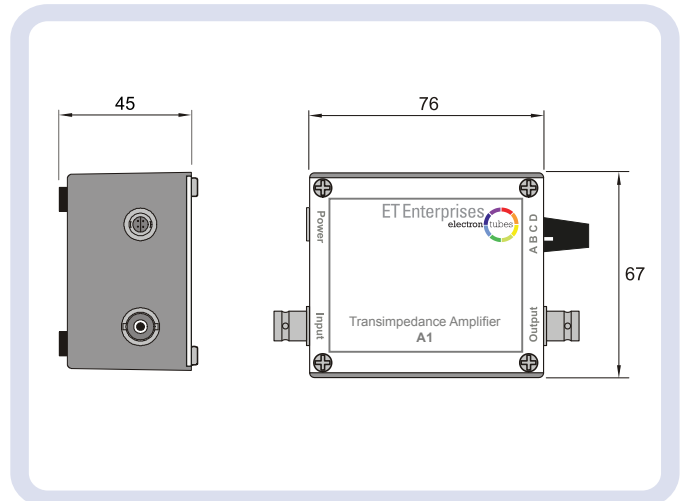
## A1 data sheet

### 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/mA to 1V/mA selected via a rotary gain switch. A low impedance output driver provides sufficient current to drive a full 10V into 1kΩ or 5V into 50Ω.

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 PM20 and PM30 series.



### 2 specification

range	mV/μA	rise time	bandwidth
A	1	20 ns	17.5 MHz
B	10	200 ns	1.75 MHz
C	100	2 μs	175 kHz
D	1000	20 μs	17.5 kHz
noise output			1 mV p-p (range D) 10 V max into 1kΩ 5 V max into 50Ω
power requirements			+15V at 100 mA -15 V at 100 mA
weight			200 g

### 3 connections

Signal Input and Output

Power Input

Pin

- 1
- 2
- 3
- 4

50Ω BNC Socket

4 Pin Lemo series 1

Function

- +15V in
- 15V in
- not connected
- 0V