Option: Transimpedance Preamplifier and Power Supply Board

Transimpedance Preamplifier Board

The transimpedance preamplifier can convert the raw current from the SPM into a voltage and is primarily recommended for signal detection where, in addition to the high frequency components, the signal contains DC and low frequency components also. The typical gain for a SensL transimpedance amplifier is matched to provide a 2V output swing across the dynamic range of the detector.

This board is ideal for applications that require detection of continuous signals where integration of the signal is done over time., or situations where the signal is a pulse input or where the DC component is undesirable (such as ranging applications or scintillation experiments). The preamplifier circuitry allows the fast rise time of the detector to be exploited and provides the simplest way to accurately bring pulse information to the user. The signal from the preamp is then output to the user via a DC blocking capacitor to convey pulse information originating in the SPM.

Power Board

The power supply board option simplifies the input power requirements of the SPMMicro. The user does not need to supply separate voltages of +5V, -5V and bias voltage (~30V) as the power option only requires a single +5V input and generates the other two voltages. The power module plugs onto the bottom of the SPMMicro module to neatly distribute power. An input jack socket enables power to be input from the supplied by a 5VDC mains adapter or a bench supply. The bias voltage is optimally set during production, however details on adjustment via a potentiometer can be made available upon request.

+ 1 650 641 3278 (USA)
+ 353 21 435 0442 (Int'l)
sales@sensL.com
www.sensL.com