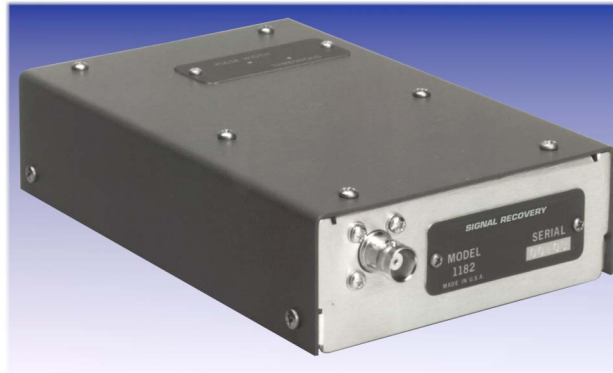


Model 1182

Amplifier/Discriminator



FEATURES

- ◆ 20 ns pulse-pair resolution
- ◆ Adjustable threshold
- ◆ Low noise
- ◆ TTL or ECL output

APPLICATIONS

- ◆ Photon counting
- ◆ Surface state studies using RFI plasmas

DESCRIPTION

The model 1182 is a cost-effective amplifier and level discriminator that outputs a logic signal when the input signal exceeds a preset threshold, commonly used to process the signal from photomultipliers or ion collectors operated in the counting mode. With both ECL and TTL outputs it is ideal for use with all photon counters and can connect directly to multichannel scalers for signal averaging measurements.

The gain and threshold are set using screwdriver adjustable controls, ensuring that they cannot be accidentally changed. The output is designed to drive long cables and can therefore be used in locations remote from the counting electronics. The module also has high immunity to RFI which means it can be used near plasma furnaces or in other applications where radio frequency interference is a problem.

Specifications

General

Single-channel level discriminator with adjustable threshold and selectable TTL or ECL output.

Input

Impedance	50 Ω
Polarity	Negative
RMS Noise Equivalent	15 μ V
Pulse Dynamic Range	150 μ V to 50 mV

Discriminator Output

Pulse	ECL or TTL into 50 Ω
Pulse Width	10 to 75 ns adjustable
Pulse Polarity	
TTL	positive
ECL	negative
Pulse Pair Resolution	Output pulse width plus 10 ns

Power

+12 V at 150 mA
-12 V at 150 mA

Power Supply

Model 1182/99-1182/98

Power supply for the model 1182. Input selectable for 110 / 220 V AC operation.