OT-01

Optical infrared detector for triggering data acquisition in Doppler radar systems

General Description

The Infinition Inc. optical detector can be used to detect the flash of projectiles exiting the muzzle, ignition of rocket motors, squibs, explosions, etc.

- Based on large silicon detector (100mm^2 detection surface);
- 75mm plano-convex lens used to focus the light on the detector;
- High gain FET amplifier using a photoconductive (biased) circuit configuration for fast rise time (fast detection) and high sensitivity;
- No sensitivity adjustment required. The light detector is AC coupled to the amplifier;
- Analog differential signal output for higher immunity against environmental electrical noise;
- Mounting on standard photo tripod using ¼-20 mounting screw.
- Very rugged construction made of aluminum.

Specifications

Lens Diameter	75 mm
Lens Focal Distance	75 mm
Field of View	7.6 degree
Detector Spectral Response	600 – 1050 nm
Detector Area	100 mm2
Output Signal (nominal)	+/-2 Volts differential, 50 Ohm
Rise-time	< 5 µsec (200kHz frequency response min.)
Power Supply	12 Volt, 12 mA
Weight	3.6kg

AT-01

Acoustic transducer for triggering data acquisition in Doppler radar systems

General Description

The Infinition Inc. acoustic transducer has been designed to detect very strong soundwaves generated by various gun firings.

- Includes a piezoelectric pick-up and a built-in amplifier to provide operation over long ranges;
- Power and signal share the same cable, allowing a simple coaxial cable to be used;
- No sensitivity adjustment required;
- Analog differential signal output for higher immunity against environmental electrical noise;
- Mounting on standard photo tripod using ¼-20 mounting screw.
- Heavily rugged construction allows the transducer to be placed extremely closed to the muzzle;

Specifications

Output Signal	+/-3 Volts
Power Supply	12 Volt, 2 mA
Weight	1.0kg

INFINITION

sales@infinition.com

www.infinition.com