SYDOR TECHNOLOGIES



INFRARED SENSOR

COMPLEX MEASUREMENTS—CRITICAL RESULTS

FEATURES

- Small size
- Advanced solid state design
- Ease of Use
- Water-resistant

APPLICATIONS

- Muzzle Exit Trigger Device
- Action Timing Measurement
- Velocity Measurement
- Trajectory Tracking
- Munition Ballistic Testing

ABOUT THE INFRARED SENSOR

The Sydor Technologies Ballistics Infra-Red (IR) Sensor is designed to detect abrupt changes in IR radiation which exceeds a preset threshold.

The sensor is designed to detect high temperature gases being emitted from boilers, explosions, gun barrels etc. Typically, it may be used for muzzle exit sensing and rate of fire measurements of weapons. In some instances, this detector can be used to verify different propellant charge-weights by discriminating between the consequent IR output when the weapon is fired. The unit is partially encapsulated for water-resistance purposes.

The unit is provided with a 15 meter cable, a universal clamp, and a small stand is provided to facilitate installation. this detector can be operated in environments spanning 0 to +40 °C.

PRODUCT SPECIFICATIONS

- Spectral Response: 0.8 to 1.8µm, peak sensitivity @1.55 µm
- Threshold: Adjustable
- Repitition Rate: Flash duration limited, ~8,s between events
- Output: Positive or negative pulses duration approximately 1 ms, open collector transistors driving 4K7 resistors between the supply rails.
- Power: 9 Volts DC @ 10 mA current, operational between 5 V and 12 Volts DC
- Rate of Fire: 6,000 rpm