



The TTech-81 PIR Curtain Sensor has the ability to generate an invisible detection zone which will activate when subjects and objects are detected passing through it.

Subjects can be detected at 500+ feet away and Vehicles up to 1/2 mile and beyond. Field-Of-View is 1% wide, reducing false alerts and allowing very precise detection zone placements

The TTech-81 PIR curtain sensor may be removed from the solar support kit and used independently with battery packs in remote locations.

A simple contact closure is used to trigger network devices like BuckEye Cam and Vortex Sensors or any other device you choose.



Long Range PIR Curtain Sensor TTech-81

General Specifications

Mechanical

Weight	3.0 lbs (1.4 kg)
Size	3.50" (8.89 cm) dia x 12.93" (32.84 cm) long
Enclosure	Painted PVC
Colors	Green, White, Tan, Grey

Optical

Nominal Range	500 ft (152 m)
Horizontal Field of View	1.1 °
Spectral Response	8 to 14 microns
Detectors	Pyroelectric POD (Parallel Opposed Dual) Lithium Tantalate integrated sensors

Electrical

Supply Voltage	10.2 to 30.0 VDC (As a low voltage indication, unit will give continuous alarm below 9.40 V). Reverse voltage protected up to -20 Volts. Positive transient protected up to 60 Volts.
Supply Current	4.8 mA nominal, 5.0 mA maximum 11.0 mA with cover removed and alarm LED activate
Relay	
Output Ratings	Maximum Switching Voltage: 110 VDC, 125 VAC Maximum Switching Current: 1.0 A
Switch Configuration	Maximum Switching Power: 30 W, 63 VA Minimum Switching Capacity: 10 μ A, 10 mVDC Open collector, NPN, 40 VDC, 40 mA
Transistor	25 Ohm @ 25 °C
Output Impedance (Typ.)	PTC resistor, current limited
Output Protection	Internal Red LED (Active when back cover is remove
Alarm Indication	2.0 seconds
Alarm Hold Time (Typ.)	Finger adjustable knob potentiometer with markings at 10%, 50% and 100% (10:1 range)
Sensitivity Adjustment	.125" to .375" diameter
Strain Relief Cable Range	24 AWG minimum
Terminal Block Wire Size	18 AWG maximum

Environmental

Operating Temperature Range	-40 °C to +70 °C
Storage Temperature Range	-40 °C to +70 °C
Atmospheric Pressure	1 atmosphere (15 PSI) positive or negative (vacuum)
Sealing	Watertight hermetic seal, provided strain relief is properly tightened around cable (RTV sealant is recommended) and rear cover is properly tightened.

- NOTES:**
1. The internal aluminum housing from the front optical window to the rear PC board is hermetically sealed and nitrogen backfilled to prevent condensation of the optics at low temperature. Any disassembly of this unit will break the seal and void the warranty.
 2. Foil shielded cable is recommended for RFI protection.