

## IR102 Infrared Temperature Sensor



- **Easy to Mount**  
*... mounts to exterior of cab, side mirror*
- **Durable Design**  
*... sealed anodized housing and stainless steel brackets*
- **Fast Response time**  
*... quickly measures variations in temperature*
- **Wide Sensing Range**  
*... measures temperatures -70°C to 380°C for several possible applications*

The **IR102** is a rugged, infrared sensor for non-contact temperature sensing. This simple point-and-shoot device is pre-calibrated and easy to use. The emitted infrared energy is focused through a Fresnel lens and onto an IR receiver. The IR102 sends the infrared temperature reading, as well as ambient temperature, to a remote display unit (ST100) or compatible spreader control.

There are numerous applications where a non-contact temperature approach is required: Road Surface for snow and ice control; Manufacturing Processes; Agriculture; Frost-Sensing; Quality Control; and many others.

### Specifications:

- ◆ Supply voltage: +10 - 32 VDC
- ◆ Operating Temperature: -40°C to +85°C
- ◆ Output: PWM signal, 0 - 5 VDC, current sinking
- ◆ Temperature sensing span: -70°C to +350°C
- ◆ View angle: 20 degrees, 4" spot diameter with each foot of range; Fresnel lens focuses the infrared energy
- ◆ Enclosure: Anodized aluminum, 3 sections with O-rings between each; recessed lens to keep dirt out; stainless-steel brackets with U-bolts for secure mounting.



Electro-Hydraulic Controls

Designed and Manufactured by  
**DITCO**

## Application Examples:

### Agriculture

- Livestock/poultry monitor
- Crop canopy/hydration/harvest monitor
- Frost alert

### Recreation

- Hot pavement alert

### Transportation

- Ice warning/detection

### Food

- baking, candy-chocolate processing, canning, freezing, frying, mixing, packing, roasting

### Glass

- drawing, manufacturing/processing bulbs, containers, annealing

### Metals (ferrous and nonferrous)

- annealing, billet extrusion, brazing, carbonizing, casting, forging, heat treating, inductive heating, rolling/strip mills, sintering, smelting

### Quality control

- printed circuit boards, soldering, universal joints, welding, metrology

### Paint

- curing, drying

### Paper

- coating, ink drying, printing
- photographic emulsions, web profiles

### Plastic

- blow-molding, RIM, film extrusion, sheet thermoforming, casting

### Remote sensing

- clouds, earth surfaces, lakes, rivers, roads, volcanic surveys

### Rubber

- calendering, casting, molding, profile extrusion
- tires, latex gloves

### Silicon

- crystal growing, strand/fiber, wafer annealing, epitaxial deposition

### Textile

- curing, drying, fibers, spinning