

## Resistance Ranger Cyclops Operator Presence Sensor

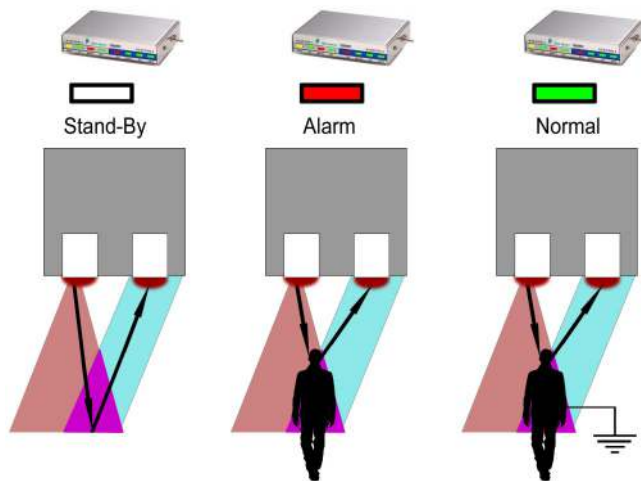
### Assure ESD Compliance with a Infrared Sensor for the Resistance Ranger Constant Monitor System

CYCLOPS™ operator presence sensors, from Transforming Technologies, assure compliance with personnel grounding requirements and protect ESD safe workstations by sensing when an operator is within the protected work area. An operator who approaches the workstation without connecting their wrist strap causes the Resistance Ranger monitor with the CYCLOPS™ sensor to alarm. The alarm continues until compliance is achieved, preventing isolated operators from damaging ESD sensitive devices

### The Superior Resistance Monitoring System

Workstations using resistance monitors are almost never at risk for a failed ground connection. This type of monitor is used with a two-wire (dual conductor) wrist strap. When a person is wearing a wrist strap, the monitor observes the resistance of the loop, consisting of a wire, a person, a wristband, and a second wire. If any part of the loop should open (become disconnected or have out of limit resistance), the circuit will go into the alarm state.

Meets or exceeds requirements of ANSI ESD-S20.20 and ESDA Standard 1.1-2006



### Applications:

ESD constant monitors reduce production costs by eliminating the time spent on testing wrist straps. Further savings may be realized by reduced ESD damage from broken wrist straps and work surface failures. Resistance based monitors are the most accurate technology available.

This document is prepared for our customers as a service, and is to the best of our knowledge true and accurate. However, it is understood and agreed by the users of this document that we will accept no liability for the conclusions reached. Users of this document may therefore wish to perform additional testing before determining that products mentioned are suitable.

RESISTANCE  
**RANGER**



### Features

- Alarms When A Person is Sensed and Not Grounded By A Wrist Strap
- Works with Dual Wire Resistance Monitoring Technology
- Prevents Isolated Operators from Damaging ESD Sensitive Devices
- Causes Audible and Visual Alarms If ESD Compliance is Not Reached

### Compatibility:

Works with the [Resistance Ranger Series](#) from Transforming Technologies:  
CM1600, CM1601,  
CM1602, CM2815 and CM2800