

SPARTAN MAX CM330

Constant Monitor with IR Sensor & Relay

The Spartan Max Constant Monitors provide ongoing testing of single wire wrist straps and ESD worksurfaces.

The Spartan MAX not only eliminates time consuming wrist strap testing, it removes the danger of wrist straps failing during a shift and possibly exposing highly sensitive materials to static. Both audible and visual alarms signal when the wrist strap, worksurface or ground fail. A Park button and Park Snap is used to eliminate false alarms at disconnect.

Enclosed in a durable metal case with built in mounting brackets, the monitors can be installed underneath table tops to save work space. The CM330 monitors meet or exceed the recommendations of ANSI ESD S20.20.

Max ESD Protection with an Operator Sensor and Relay

The CM330 ensures ESD protection with an infrared Operator Presence Sensor that will trigger the alarm if a person is detected and not connected to the monitor. A built in relay terminal activates during a failure which can be used to trigger an external signal such as a light tower, buzzer or power switch.

Capacitance Technology

The CM330 sends out a signal through the wrist strap that detects the capacitance of the person and ground. When both are present, the monitor goes into an unalarmed state. If the electrical connection to the person or to ground should fail, the circuit will go into the alarm state to signal there is a problem.

Calibration / Verification

The CM330 monitors are designed to be adjustment free. Annual calibration is not necessary because the devices are a fixed system. If, however, your quality program requires testing, the CM330PV verification tool is available to verify that the monitor is functional.



Features

- Continuously Monitors One Wrist Strap and One Work Surfaces
- Built-in Relay Terminal to Connect to External Locks, Signals, Lights etc.
- Alarms When A Person is Sensed and Not Grounded By A Wrist Strap
- Compatible with Standard Single Wire Wrist Straps & Most ESD Mats
- Park Button and Park Snap
- Factory Calibrated; No Adjustments or Annual Recalibration

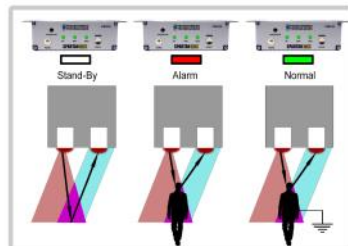


Optional Relay

Connect the CM330 to NC/NO compatible signal tower, buzzer, door lock or power outlet.

Operator Presence Sensor

Detects a person and alarms if they are ungrounded.



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.

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Single Wire Constant Monitor with Relay

The SPARTAN MAX Continuous Monitor features a built-in relay terminal that can be integrated with electronic locks, lights, buzzers, etc. The relay will activate when a failure is reported by the Continuous Monitor.

Transforming Technologies offers two stock options:

- **CM-SIREN** - A light tower with Green & Red Lights
- **CM-RELAY-IOT** - A relay controlled power strip that can control power to your workbench/tools based on the status of your constant monitor. A single logic input signal controls one high-current SPDT AC relay. This one relay trigger signal switches three AC outlets simultaneously using a single-pole double-throw relay. One outlet normally is on. Two are normally off. A fourth outlet is unswitched. All outlets are protect-ed against surges and overloads. The relay can also be controlled by an AC input voltage of 12 to 120VAC. No changes or jumpers are required.



RELAY TERMINAL

Features a relay terminal that can be integrated with electronic locks, lights, buzzers, etc. The relay will activate when a failure is reported by the CM330 Continuous Monitor.



Option 3: Any NC/No Switch

Model CM330

Power Outlet
Power Input:
Temperature limits:
Adjustments:

Specifications

12 VDC, 200mA.
120VAC—60hz
50° F (10°C) to 122° F (50°C)
No serviceable components;
see periodic verification tools
1.5" H x 5.75" W x 2.25" H

Dimensions:

Weight:
Monitoring Capabilities

7.4oz
1 wrist strap/person + 1 mats

Alarm Limits

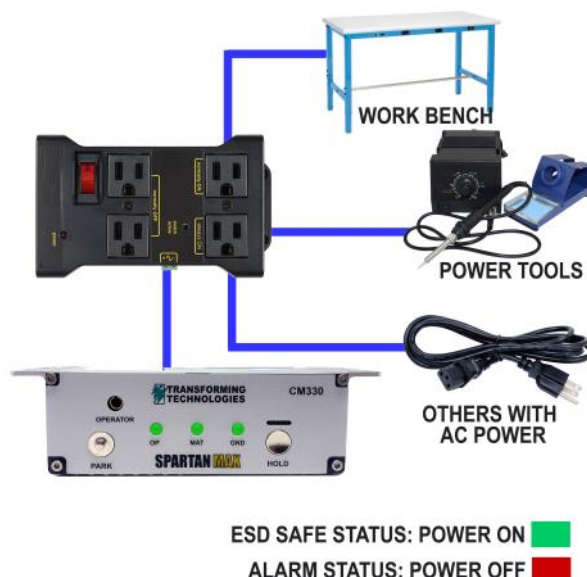
Wrist Strap
Wrist Open
Circuit Voltage :
Mat Open Circuit
Voltage:
Audible Alarm

6.5 megohm.
0.7 VDC, +0.1VDC @ < 2mA
5.0-7.5 VDC
10 beeps (max) 5 seconds

Part Numbers

CM330
CM-SIREN
CM-RELAY-IOT
FM1515
FM1515CM
FM1515NR
CM330PV

Constant Monitor
Light Tower
Relay Outlet Strip
Work Surface Ground Cable
Monitor Ground Cable
Monitor To Work Surface Cable
Periodic Verification Tool



About Transforming Technologies

Since 1998, Transforming Technologies has helped electronic manufacturing facilities to protect their products and processes from the many serious problems associated with static electricity.

Transforming Technologies offers a wide range of unique and outstanding products to detect, protect, eliminate and monitor electrostatic charges. Our products are integral components of an effective static control program.

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.



TRANSFORMING TECHNOLOGIES

OUTSTANDING ALTERNATIVES IN STATIC CONTROL

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