Rev: 2020-07-21

SPARTAN ONE Constant Monitor Model CM300 - One Operator

Ensure Your ESD Workstation is Static-Safe with a Single Wire Constant Monitor.

The Spartan Series Constant monitors provide ongoing testing of single wire wrist straps and ESD worksurfaces. The CM300 not only eliminates time consuming wrist strap testing, it removes the danger of wrist straps failing in the field and possibly exposing highly sensitive materials to static. Both audible and visual alarms signal when the wrist straps fail. Enclosed in a durable metal case with built in mounting brackets, the monitors can be installed underneath table tops to save work space. The CM300 series monitors meet or exceed the recommendations of ANSI ESD S20.20.

Why Use Constant Monitors?

The first and best line of defense against static damage is wrist strap grounding, but these wrist straps wear over time and must be tested to ensure they are working properly. ESD Constant monitors reduce production costs by eliminating the time spent on testing wrist straps before each shift. Further savings may be realized by reduced ESD damage from broken wrist straps.

Capacitance Technology

The CM300 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 CM300 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, a verification tool is available to verify that the monitor is functional.



Features

- Continuously Checks One Wrist Strap
- Audible and Visual Alarms
- Compatible with Standard Single Wire Wrist Straps
- Easy To Use: Simply Plug In Wrist Strap
- Factory Calibrated; No Adjustments or **Annual Recalibration**

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.

Specifications:

Alarm set point:

Audible Alarm

Wrist open circuit voltage 0.7 VDC, +0.1VDC @ < 2mA Verification Tool CM410 PV

CM300 CM410PV

Part Numbers:

Alarm/LED (green: safe, red: unsafe) Alarm indicators

0.88" H x 1.75" W x 1.25" D Dimensions

6.5 megohm Weight 7.4 oz

10 beeps (max); 5 seconds

Power Input 120VAC-60hz

Monitoring capabilities One wrist strap/person Power Output: 12VDC, 200mA

Adjustment No adjustments required

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.

Single Wire Constant Monitor

Periodic Verification Unit