# **SPARTAN MONITORS**

SINGLE WIRE CONTINUOUS MONITORS

**RELIABLE - CONSISTENT - ACCURATE** 



CM300

# Ensure You Are Grounded and Your ESD Workstation is Static-Safe with the Spartan Series Single Wire Continuous Monitors.

The Spartan Series Continuous Monitors provide ongoing verification of the wrist strap system and the work surface ground. The Spartan system eliminates the need for routine wrist strap testing and documentation and alarms when failures occur, greatly reducing the risk of ESD damage between tests. Both audible and visual alarms indicate a failure with the wrist strap system or work surface ground. Enclosed in a durable metal case with built in mounting brackets, the monitors can be installed underneath table tops to save work space.

#### Why Use Continuous Monitors?

The first and best line against ESD damage from operators is wrist strap grounding. The wrist strap system must be frequently tested to ensure it is working properly. Continuous monitors eliminate the time spent on testing wrist straps before each shift. Further savings may be realized by reduced ESD damage from broken wrist straps during a work shift.



### **Benefits & Features**

- Continuously Checks the Ground Connection for Wrist Straps & Worksurface
- Audible & Visual Alarms Signal A Problem
- Compatible with Single Wire Wrist Straps
- Durable Anodized Aluminum Case
- Easy To Use: Simply Plug In Wrist Strap
- Factory Calibrated; No Adjustments or Annual Recalibration Needed

Spartan ONE	Spartan TWO	Spartan PRO
CM300 FTRANSFORMING OPERATOR SPARTAN UNIX	TRANSFORMING CM310 OFERATOR BENCH SPARTAN SULU	TRANSFORMING  OFFRATOR2  OFFRATOR2  OFFRATOR1  SPARTAN P35
CM300: Monitors One Operator Only	CM310: Monitors One Operator and One Worksurface	CM320: Monitors Two Operators And One Worksuface

#### Capacitance Technology

The Spartan 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 Spartan 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 performing to specifications.

Wrist open circuit voltage	0.7 VDC, +0.1VDC @ < 2mA	Periodic Verification Tool	CM410PV (CM420PV can be used as well).
Mat open circuit voltage	5.0—7.5 VDC	Weight	CM300: 7.4 oz CM310: 7.8oz CM320: 12.4oz
Alarm indicators	Visual, audible (green: safe, red: unsafe)	Power Input	120VAC—60hz
Alarm set point : Wrist strap	38 to 87pF (human body); with 1 megohm strap resistance	Power Output:	12VDC, 200mA
Alarm set point : Mat	6.5 megohm	Adjustment	No adjustments required
Monitoring capabilities	CM300:One wrist strap/person CM310: One wrist strap/person and work surface CM320: Two wrist straps/people and work surface		
Audible Alarm	10 beeps (max); 5 seconds		

# **Continuous Monitors from Transforming Technologies**

Transforming Technologies supplies three families of constant monitors. Visit www.transforming-technologies to learn more about each family or call 419-841-9552 to speak with a Static Control Expert.



SPARTAN GONSTANT MONITORS



CM400 SERIES

**CM300 SERIES** 

CM1600 SERIES

#### **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.



## TRANSFORMING TECHNOLOGIES

OUTSTANDING ALTERNATIVES IN STATIC CONTROL

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