

# Continuous Monitors with Wave Distortion Technology from Desco



### **VAVE DISTORTION**

#### Wave Distortion Technology is the Most Reliable Technology for Continuous Monitoring of Single-Wire (Conductor) Wrist Straps

Wave Distortion Technology continuous monitors feature low test voltage, a low monitor range for 1 megohm of resistance in the operator's wrist strap, and instantaneous detection of an intermittent or failure of the path-to-ground of the operator or work surface that other monitors / technologies miss.

#### **How Wave Distortion Technology Works**

- 1. Applies a continuous test voltage (1.2 volts peak-to-peak at 1-2 Micro Amps)
- 2. The connection to the human body (HBM) creates a sine wave that the monitor circuit compares to the total impedance to established patterns.
- 3. By monitoring the "distortions", or shape of the sine wave, Wave Distortion Technology determines if operator is grounded properly.
- 4. Different "distortions" represent different parameters of the monitor.

Contact DESCO to Request a Demo

## Wave Distortion Technology vs other Wrist Strap Monitoring Technologies

|   | Basic<br>Capacitance /<br>Impedance | Resistance         | VAVE DISTORTION Capacitance / Impedance  |
|---|-------------------------------------|--------------------|--|
| 1 Megohm<br>Safety Resistor<br>Monitoring | Some                                | Yes                | YES Desco monitors the required lower and upper limits for wrist straps from the ANSI/ESD S20.20-2104.                                   |
| Test Voltage                              | 3.5V                                | Up to 16V          | 1.2V Lower voltage reduces the risk of damage when handling ESD susceptible devices.   |
| Banana Jack<br>Monitoring                 | Yes                                 | No                 | YES Alarms when the connection between the banana plug and monitor's jack is intermittent of fails.                                      |
| Response Time                             | ~1 second                           | Up to<br>2 seconds | <50 Milliseconds<br>Instantaneous detection of<br>an intermittent or failure in<br>the path-to-ground of the<br>operator or worksurface. |
| In-Use<br>Verification                    | No                                  | Some               | YES Verify test limits of Wave Distortion Monitors without removing from workstations.   |



