

3M™ Iron Man Plus Workstation Monitor CTC331

Soldering irons touch the most sensitive components in your electronics assemblies. Yet, if the soldering iron is not grounded properly, these components may be exposed to significant overvoltage that could cause severe damage and affect reliability of the product. Soldering irons with poor grounding can induce current into the circuit.. Poor grounding may be caused by many factors, including ground failure in an electrical outlet internal failure of the soldering iron, oxidation of the tip and other factors.

Iron Man Plus Workstation Monitors CTC331 measure voltage directly on the circuit board during assembly. If there is electrical overstress (EOS) detected on the board, Iron Man Plus Workstation Monitors CTC331 will provide both an audio and a visual alarm. Soldering irons are not the only threat; metal tools such as tweezers and screwdriver bits can also induce significant overvoltage to the circuit. Iron Man Plus Workstation Monitors CTC331 will detect most occurrences so that corrective action can be immediately applied.

This monitor adds complete monitoring of the workbench, including wrist strap and mat monitoring. The operator is monitored for proper connectivity and for excess body voltage. The mat is monitored for proper connectivity. Iron Man Plus Workstation Monitors CTC331 are designed to provide coverage of the workbench for electrostatic discharge (ESD) and EOS.

Applications

- Electronics Assembly
- Repair and Service
- Medical
- Environments where static-sensitive components are being handled



Features

- Overvoltage monitoring of electronics assemblies
- Soldering iron overvoltage failure alarm
- Operator wrist strap monitoring
- Operator body voltage monitoring
- Mat ground monitoring
- Audio and visual alarms

Product Specifications

Properties	Value
Power	
AC/DC Adapter	Universal: 100 - 240VAC, 0.5A, ~ 50/60 Hz Output: 12VDC, 1.5A
Overvoltage Alarm	
Alarm Threshold Ranges	0 to \pm 5V (default set point); 0 to \pm 50V typical
Threshold Adjustment	Potentiometer
Threshold Range	Range selected by jumper
Operator Grounding	
Wrist Strap	Dual, 3.0 mm plug
Number of Wrist Straps monitored	1
Body Resistance Alarm Level	10 M Ω typical
Body Voltage Alarm Level	\pm 2.5V typical (Default)
Mat	
Monitoring Mat grounding	Yes
Alarm	
Visual	LED
Audio	Buzzer
General	
Dimensions (approx)	0.85" H x 2.4" W x 2.6" L 22 mm H x 61 mm W x 66 mm L

Product Data Sheet

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