

BFN-TGM-II Three-Channel Mat Ground Resistance Monitor

The BEN-TGM-II Three-Channel Mat Ground Resistance Monitor is a Second-Generation Workbench Mat Grounding Resistance Monitoring Product Newly Launched by HORB. It Features Optimized Resistance Measurement and Networking Capabilities, Along With a Redesigned Product Appearance and Interface Layout. The Product Includes Monitoring, Communication, And Audible / Visual Alarm Functions. It Triggers Audible and Visual Alarms When the Detected Resistance Exceeds the Set Range. Used in Conjunction With Zhongming Technology's Intelligent Monitoring Management Platform (IMMP), It Can Send Information to the IMMP Platform Via LoRa or RS485 Communication. Alarm Resistance Values can be Set Via the Host Computer. It Enables Real-time Online Monitoring of Workbench Mat Grounding Resistance, Facilitating Data Transmission, Dstorage, and Snalysis. Suitable for Applications in Electronic Manufacturing, Medical / Pharmaceutical, Semiconductor, Photoelectric / Optical, Precision Machining, Food Processing, and Aerospace Manufacturing Industries.



Product Parameters

Operating Voltage	ADC12V	Accuracy	±10%
Operating Current	<100mA	Communication	Supports RS485 Communication LoRa Wireless Communication
Factory Alarm Resistance Value	35 MΩ	Operating Environment	Temperature: 0°C ~ 50°C Humidity: 20%~85% RH
Alarm Resistance Value Setting Range	1~1000MΩ	Dimensions	128*57*23.8mm (LWH)

Functional Description

◆ Mat Ground Resistance Monitoring & Audible/Visual Alarm

The Grounding Resistance Status of the Three Channels can be Viewed Via the Status Indicators on the Front Panel. A Solid Green Light With the Buzzer Silent Indicates that the Mat Ground Resistance is Within the Alarm Range. A Solid Red Light With the Buzzer Sounding Indicates Abnormal Mat Ground Resistance. Factory Alarm Resistance Value: 35M Ω, Accuracy: ±10%; Alarm Resistance Value Setting Range: 1MΩ~1000MΩ, Accuracy: ±10%; Status Indicator: Green Light - Normal, Red Light - Abnormal; Buzzer: Sounds an Alarm When the Status Indicator Lights Up.

◆ Communication & Networking

Can Connect to a Computer Via LoRa or RS485 Communication, Enabling Networking of Multiple Devices. Can be Integrated With the Intelligent Monitoring Management Platform (IMMP) to Upload Workbench Mat Grounding Resistance Values to the Platform.

◆ Resistance Value Setting & Remote Product Upgrade

Alarm Resistance Upper and Lower Limits can be Set Via the Cleansy Cloud Platform (The lower Limit Minimum Value Cannot Exceed -20% of the Maximum Measurable Value; The Upper Limit Minimum Value Cannot be Less Than +20% of the Minimum Measurable Value; The Lower Limit Must be Less Than the Upper Limit). Product Firmware can be Upgraded Remotely Via the RS485 Interface Network.

◆ Hot-Swappable

The Connection Ports Between the Product and the Mats Feature Hot-swap Capability for Convenient Installation.