

ID-471B Conduction to Ground Monitor

The ID-471B Conduction to Ground Monitor is a control and display unit which is usually mounted on a wall at about shoulder height. This unit is connected by cable to a stainless steel plate on the ground just in front of the wall-mounted unit. By standing on the metal plate and holding the test handle on the wall unit the monitor circuit is activated and the electrical resistance is measured between the hand and the floor plate.

In a number of industrial operations it is essential for personnel to be effectively bonded to ground at all times to prevent electrostatic spark discharges damaging sensitive electronic components or circuits, or causing ignition of flammable vapours or materials. Bonding to earth may be conveniently achieved via conductive footwear, but it is necessary to know if this bonding remains effective in practice. The ID-471B Conduction to Ground Monitor provides a simple to use and robust unit for checking the effective resistance between an operator and ground. The unit can be mounted at the point where personnel enter a hazardous area from a safe area, and may be used to prevent entry of staff with inadequately conductive footwear.

There are two versions of the ID-471B available.

The ID-471B/BS model monitors for a measured value of resistance falling outside two set values of 100Mohm and 5Mohm the red indicator is illuminated corresponding to the red portions of the analogue meter display, but if the resistance is between these two values (a PASS result) the green indicator is illuminated. A B/BSR version is available which includes 2 pairs of relay contacts that operate when the instrument detects a PASS result.

The ID-471B/BS instrument can also be supplied with no lower limit set. In this configuration, the instrument indicates a PASS condition from 0Ω up to 100MΩ.

The ID-471B/EN instrument is supplied with an upper limit of 1000MΩ pre-set

Our engineering consultants would be pleased to discuss your requirements with you, and we invite you to contact our team at info@idbsystems.co.uk, alternatively you can call us on +44 (0) 1492 864 126.



SPECIFICATIONS & FEATURES

Power Supply:	240V, 50Hz (or 110V)
Test Voltage:	12V maximum
Critical resistance value:	471B/BS: 100MΩ internally pre-set 471B/EN: 1000MΩ internally pre-set
Control box dimensions:	170 x 210 x 100mm
External connections:	An earth wire connection to stainless steel ground plate, and mains connection (footplate not included, but can be ordered separately).
Relay Contacts:	240VAC, 2A – There are 2 sets of contacts available at a side-mounted XLR-style connector (<u>available on the BSR and ENR models only</u>)*.
Self-Test & Maintenance:	The ID-471 is equipped with a simple to use switch mounted on the side of the unit to test operation, thus minimising the time for regular maintenance checks. IDB Systems operate a calibration and maintenance support service details of which can be tailored to meet individual customer preferences.

* Please email support@idbsystems.co.uk for further details.