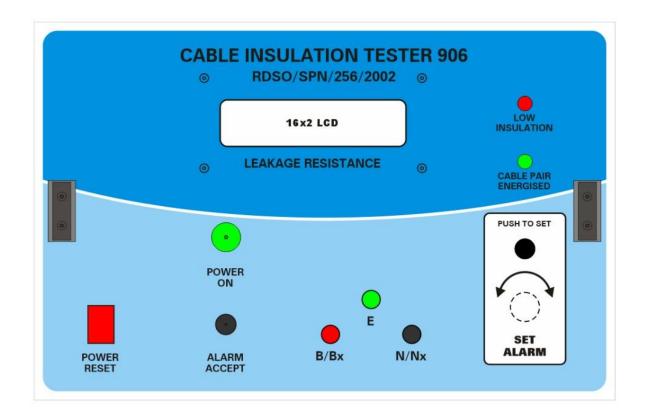


# Cable Insulation Tester Cum Detector



### Scope:

The Cable Insulation Tester cum Detector is used to measure Insulation Resistance of individual signalling cable pairs when they are unenergized. This is different from the Earth Leakage Detector as the Earth Leakage Detector is designed to measure the insulation resistance of the all energized busbars with respect to ground.

### Features:

The basic operating principle is similar to that of Earth Leakage Detector with RDSO specification – RDSO/SPN/256/2002. The Cable Insulation Tester cum Detector is designed to measure the Insulation Resistance of isolated i.e. unenergized signalling cable pairs. The device can measure Insulation Resistance values of up-to 100M  $\Omega$ . In case an energized cable pair is connected, the device will isolate itself and start functioning as a tester wherein a visual indication i.e. a Green LED will indicate that the cable pair is energized. The device also allows a user to set a reference Insulation Resistance Value up to 20M  $\Omega$ . If the IR value of cable pair connected is below the set value, a visual indication in the form of an LED is given.



## Technical Specifications:

Working Voltage	: 230V AC +/- 10%	
Detecting Voltage	: 500V DC Nominal	
Reference Setting Values	: 0.5M $\Omega$ to 20M $\Omega$	
Indicating Device	: LCD Meter that can display up-to 100 M $\Omega$	
Bus-Bar Voltages	: 110V AC	
	: 24 to 110V DC	
Panel Controls	: Digital Meter	: 0.1M $\Omega$ to 100M $\Omega$
	: Power ON Indication	Green LED
	: Cable Pair Energised	Green LED
	: Fault Indication	Red LED
	Two terminals for connecting the pair under	
	measurement & one terminal marked E for	
	connecting to the Earth of the cabin	
Dimensions	200X136X300 MM (+/- 25mm)	

#### Operating Instructions

- Switch ON the instrument by switching on the power button. The Green Power ON LED will glow if the instrument is switched on
- Connect earth lead (GREEN) on EARTH terminal
- Connect both B/Bx & N/Nx to their respective terminals to check if the pair is energized
- If the cable pair is energized, the Green LED marked 'Cable Pair Energized' will glow
- If the cable pair is energized, take necessary steps to disconnect the cables from the network in order to measure their Insulation Resistance
- Once the cables are unenergized, connect all 3 probes to their respective terminals
- The reading now displayed on the LCD meter is the Insulation Resistance of the cable pair respect to Earth
- In order to set an alarm for low Insulation Resistance value, press the 'Push to Set' button and rotate the potentiometer to increase/decrease the alarm value. Press the 'Push to Set' button and the potentiometer together to save the alarm value
- If the Insulation Resistance of the attached cable is less than the set value, the Red LED marked 'Low Insulation' will light up and an audio alarm will be given
- The audio alarm can be muted by pressing the 'Alarm Accept' button