

PERTRONIC INDUSTRIES LTD

DATASHEET

Loop Cable Tester



Overview

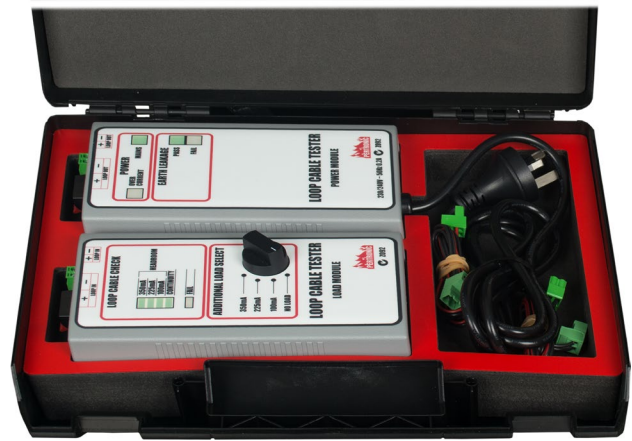
The Pertronic Loop Cable Tester is a test set for loop wiring in analogue addressable fire alarm systems. It is designed for validating new loop cabling prior to connecting a fire alarm control panel, and for testing and fault-finding loops on existing systems.

The test set comprises two compact modules: the power module and the load module. It is supplied in a carry case.

The loop cable tester has been developed because standard instruments cannot be used for testing continuity or earth leakage on an analogue addressable loop. Some unpowered addressable devices break the loop into a series of isolated sections. The test set overcomes this difficulty by powering up the loop devices. With all devices powered up and drawing quiescent current only, the loop should behave similar to a pair of wires.

The power module checks earth isolation, provided it is connected to the same mains earth as the fire alarm panel. DC power is also supplied by the power module.

The load module checks for continuity and voltage drop. For any setting of the load switch, if the voltage at the load module falls below 15 V, the load module indicates a test fail.



Pertronic Loop Cable Tester

Features

- » Separate power and load modules facilitate testing:
 - » A complete loop, with both modules at the same location
 - » Part of a loop, or a spur, with the modules at separate locations
- » Power Module
 - » Mains LED (Green)
 - » Over-Current LED (Red)
 - » Earth leakage pass & fail LEDs (Green & Red)
 - » Mains power lead
- » Load Module
 - » Four-position load select rotary switch
 - » Continuity LED (Green)
 - » Three-level loop check LEDs (Green): 100 mA, 225 mA, 350 mA
 - » Loop check fail LED (Red)
- » Each module has a pair of clamps for bare wire loop connections, as well as a two-pin connector for plug-in loop connection

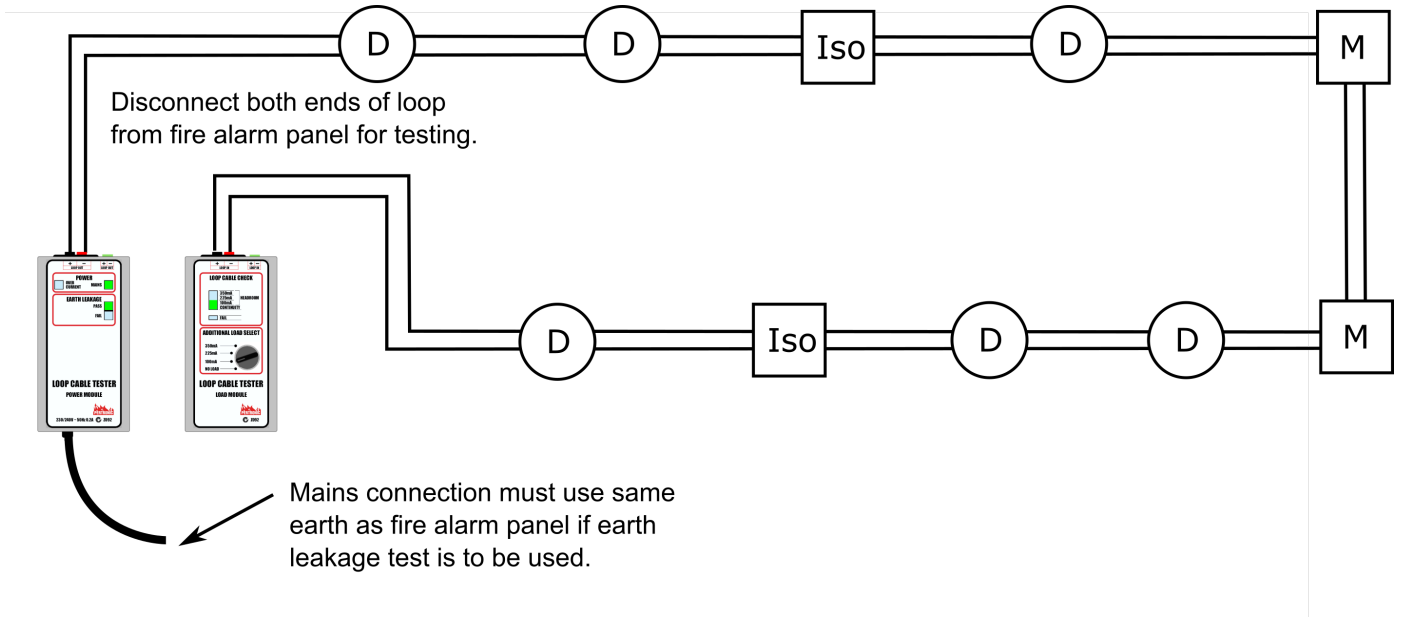
Power Module Specification

Output Voltage	24 Vdc
Over Current Threshold	600 mA
Earth Leakage Warning Threshold	1 M Ω between mains earth and either loop wire (Both Red and Green LEDs light up)
Earth Leakage Fail Threshold	500 k Ω between mains earth and either loop wire (Red LED lights up)
Dimensions (L x W x D mm)	206 x 100 x 40

Load Module Specification

Loop Check Fail Threshold	15 V
Dimensions (L x W x D mm)	206 x 100 x 55

Typical Test Configuration



Ordering Information

Product Code	Product Code (NZ & Fiji only)	Description
LOOPTEST-KIT-A	LOOPTEST-KIT	Analogue Loop Tester Kit (2 Modules Complete with Carry Case)
LOOPTEST-LOAD	LOOPTEST-LOAD	Analogue Loop Tester (Load Module)
LOOPTEST-POWER	LOOPTEST-POWER	Analogue Loop Tester (Power Module)
LOOPTEST-CASE	LOOPTEST-CASE	Analogue Loop Tester Carry Case PIL-LTCF

The information in this document must not be treated as partial or complete instructions for the design, construction, installation, commissioning, or maintenance of fire detection, fire alarm, or building evacuation systems. Fire and evacuation systems must be designed and installed by properly qualified persons, in accordance with all regulatory requirements.

Unless explicitly stated otherwise, this document provides typical specifications and nominal dimensions. Actual product performance and dimensions may vary.

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