



# SSI Portable Tester

The ESP PTE002 Portable Tester provides a quick and easy way to test ESP SSI/M transient overvoltage protectors.

Transient overvoltages are large, very brief increases in voltage caused by indirect lightning strikes. They can damage and destroy unprotected electronic equipment. Critical equipment, such as signalling systems, are susceptible to transient overvoltage damage yet their continuous operation is essential. Therefore, Furse have developed a range of transient overvoltage protectors specifically for these trackside systems.

Furse ESP SSI/M Lightning Barriers effectively prevent transient overvoltage damage to Solid State Interlocking (SSI) systems.



## Features and benefits

- ✓ Accepted for use on Network Rail infrastructure (NRS PADS reference 094/020033).
- ✓ Six simple tests to check the surge protection status across all inputs and both polarities.
- ✓ Can test approximately 500 modules on a single set of batteries without backlight. (Approximately 300 modules whilst using the backlight.)
- ✓ Lightweight unit (less than 1kg).
- ✓ Integral locating pin ensures ESP SSI/M module is correctly aligned for testing.
- ✓ Test pass values clearly listed below the LCD display.
- ✓ Clear LCD display with backlight for visibility in low level light conditions.
- ✓ Integral battery monitor alerts the user when replacement is required.
- ✓ Supplied with a sturdy carry case with adjustable shoulder strap for comfort.
- ✓ Carry case includes a separate, easily accessible compartment to hold spare batteries and replacement ESP SSI/M modules.
- ✓ Handy instruction leaflet, including test/pass values for pre-1994 ESP SSI/M units.
- ✓ External battery compartment, so no internal access required to replace batteries.

## Electrical and Mechanical specification

		<b>ESP PTE002</b>
<b>Power supply</b>		Internal, 2x9V (PP3) batteries
<b>Temperature range</b>		-25 to +70°C
<b>Connection type</b>		11-pin circular relay style
<b>Weight</b>	- tester	0.78kg
	- tester and case	1.15kg
<b>Dimensions</b>		
	- tester	206 x 75 x 157 (WxDxH)
	- case	215 x 95 x 220 (WxDxH)

## Calibration

Calibration is required annually to ensure that the ESP PTE002 is accurate. A product registration card is supplied with each tester which should be completed upon receipt. Contact Furse for further details.

## Operation

Operation of the SSI Portable Tester couldn't be easier.

- 1 Push the ESP SSI/M unit into the "MODULE UNDER TEST" socket. The locating pin on the SSI/M will ensure correct orientation.



- 2 With the test selector in the "1" position, press and hold the "TEST SWITCH". Compare the value on the LCD display with the values quoted in the "TEST/PASS VALUES" table printed on the front of the tester.



If the value displayed is not within the stated acceptable range for any of the tests, replace the ESP SSI/M module.

- 3 In low level light conditions, the Backlight function will ensure the LCD display can be easily read. The Backlight will not operate until the TEST SWITCH is pressed.



- 4 Repeat steps 2 and 3 until all six tests have been completed.

## Network Rail Certification

The Furse ESP SSI Portable Tester has a Network Rail Certificate of Acceptance (PA05/02216), allowing it to be used on Network Rail infrastructure.



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