

PST Timing System



Features

- Single or dual channel operation
- Dual supply voltage
- Quartz-controlled
- 1ms resolution
- 1000 second maximum time
- Voltage, current & contact operation
- Contact status indication
- 6 digit LED display
- Compact and portable

T&R Test Equipment is a market leader in the field of protection test equipment. The range includes primary and secondary current injection equipment, voltage sources, micro-ohmmeters and high voltage test systems.

The PST timing system provides commissioning and protection engineers with a simple to use and highly accurate timing system for all types of protective devices. The unit is based on the highly regarded timing systems used in the T&R current injection systems.

The unit has three trigger sources for starting and stopping timing: two contact inputs and one current input. The contact inputs accept either volt-free contacts or a dc voltage, and auto-select for normally open or normally closed contacts.

Timing Modes

Single Contact

The timer is started on the first change of state of contact set 1, and stopped on the second change of contact set 1.

Dual Contact

The timer starts on the first change of state of contact set 1 and stops on the first change of state of contact set 2.

Current Operated

Three current input ranges are available on the PST: 1A, 2.5A and 5A. The timer will start when the current exceeds 20% of the selected range (e.g. 1A on the 5A range) and stop when the current drops below 20%.



T&R Test Equipment Ltd

PST Specification

Supply Requirements

115V±10%-6%	50/60Hz 1ph 10VA max
230V±10%	50/60Hz 1ph 10VA max

Timing System

Range	0-999.999s
Resolution	1ms
Accuracy	0.01% rdg +1d (all except current operated mode) 0.01% rdg +3d (current operated mode)

Contact Inputs

O/C voltage	24Vdc
S/C current	120mA

Vdc inputs

Min voltage	24Vdc
Max voltage	240Vdc
Input impedance	30kΩ

The state of each contact input is shown by an LED, and each contact circuit will auto-select for normally open or normally closed contacts. The contact inputs may be connected to either volt-free contacts or contacts connected to a DC voltage system (220Vdc maximum).

A DC voltage of 24-240Vdc may also be used to trigger either timer channel using the Vdc inputs. The input automatically selects for normally on or normally off voltage.

Current Operated Input

Input ranges	1A, 2.5A, 5A
Operating level	20-100% of selected range

The current operated input may be used to time devices where only a current signal is available, such as when testing miniature circuit breakers. The timer starts when the current exceeds 20% of the selected range (e.g. 200mA on the 1A range) and stops when the current drops below 20%.

Timing Modes

Three timing modes are provided, allowing timing on one or two sets of contacts or the current operated input.

Mode	Timer Start	Timer Stop
Single contact	Contact 1	Contact 1
Dual contact	Contact 1	Contact 2
Current operated	Current > 20% of range	Current < 20% of range

Temperature Range

Storage	-20°C to 60°C
Operating	0°C to 45°C

Dimensions

257mm x 103mm x 262mm

Weight

3.8kg

Protection and Safety

The unit is protected by fuses on the contact inputs and supply. An earth terminal is provided for connection to a local earth.

The unit is designed to comply with BSEN61010, and is CE marked.

Accessories

Operating manual, lead set, mains lead, spare fuse set.

The lead set supplied with the PST contains the following items:

1 x 5m 2 core leads terminated in crocodile clips

Optional Accessories

100AL Lead set.

Optional 100AL Lead Set specifications

2 x 5m 25mm² 100A leads terminated in M10 fork crimps

2 x 5m 2.5mm² 25A leads terminated in 4mm plugs

2 x 0.5m 2.5mm² 25A leads terminated in 4mm plugs

1 x 5m 2 core auxiliary leads terminated in 4mm plugs

All 4mm plugs have retractable safety shrouds.

The lead set is supplied in a reinforced plastic wallet.

Note: Due to the company's continuous research programme, the information above may change at any time without prior notification. Please check that you have the most recent data on the product.

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