



# DESCRIPTION

The Electrical Test Instruments **ORTM-4** system is a sophisticated recloser testing accessory used in conjunction with primary injection testing of oil and vacuum-type reclosers. The unit is an electronic current monitoring accessory used in conjunction with a Windows Based computer and any system for primary injection testing of oil and vacuum type reclosers and sectionalizers. It incorporates advanced circuitry and software, which provide an accurate, inexpensive and efficient means for monitoring output current and time for proper testing and calibration. Real time digital waveform recording and analysis provides true RMS (root-mean-square) reading of current, including DC offset and decay, for excellent correlation of results with manufacturers' calibration.

The **ORTM-4** interface module is designed to connect to the output of ANY recloser test set. It interfaces to a USB port of any Windows computer, and a Windows program displays trip current, trip times, and reclose times for up to five recloser operations.

A precision 10-bit A/D converter reads the current flowing through the bus bar or cable connection at the bottom of the enclosure and stores the waveform in memory. A continuous readout of TRUE RMS current is indicated at all times, and accurate readings of time and current for each operation are displayed as they occur.

After the test, one may view and analyze the waveform of each shot, and this waveform can be saved to disk for future reference. Upon exit from the program, current and time readings are saved to a disk file.

Optional software (TCC) is available which can interface to data-bases of various recloser types and can compare readings to manufacturers' data for immediate GO/NOGO verification of test results. Data can be saved, and formatted reports printed.



# **ORTM-4** PRECISION Recloser Test Set Accessory

# **SPECIFICATIONS**

#### **INPUT POWER**

USB 2.0 or later

# OUTPUT

Standard USB port for control and data acquisition.

#### MEASUREMENT SYSTEM

CURRENT INPUT (50% duty cycle, 5 minutes max.): (ORTM-4) Shunt, with 1/2"-13 hardware, 1000 Amperes

**CURRENT RANGES:** 0-50/100/250/500/1K/2.5K/5K/10K Amperes Full Scale

CURRENT ACCURACY (add 1% if not field calibrated): +/- 1% Full Scale (Continuous) +/- 2% Full Scale (Pulse)

TIMING:

Range:0-99.999 secondsResolution:0.0004 secondsTimes base1 Time base Accuracy: +/- 0.005% of reading

TIMING ACCURACY: +/- 0.01 Seconds

### DIMENSIONS AND NET WEIGHT

Height:	1.42 in.	(36 mm)
Width:	6.06 in.	(152 mm)
Depth:	7.05 in.	(177 mm)
Weight:	0.85 Lb.	(0.385 kg)

#### HOUSING

Molded from flame retardant ABS plastic

# STANDARD ACCESSORIES

USB cable ass'y, 10 ft (3.05 m)	1 pc.
1000A 100Mv Shunt	1 pc.
Operation Manual	1 pc.
Software Thumb Drive	1 pc.