

TRS1 Transformer Ratio Standard



- High Accuracy 0.01%
- Rugged Design for Field Use
- Versatile - Step Down & Step Up Ratio
- Designed to be used with large test clips or banana jack inputs
- Four-terminal Kelvin - no lead compensation required
- Universal standard for use with all ratiometers

DESCRIPTION

The TRS1 is a unit designed to be used with ratio meters as a high accuracy reference ratio standard. This unique standard is able to provide ratios in both step down (traditional ratio test instruments) and step up (Biddle Hand Crank TTR) test modes. The standard is designed for use as a laboratory calibration standard, or as a portable check standard for field ratio and phase verification of any ratio instrument.

The TRS1 can be used with any single phase and three phase ratio meter. When testing three phase ratio meters with the TRS1, one uses the instrument's single phase excitation for testing. Alternatively, three TRS1s can be combined to test a Wye-Wye configuration using the ratio meters three phase excitation test method.

APPLICATION

The TRS1 is primarily designed to be used in calibration facilities where accurate ratio transformation is required. In addition, The TRS1 is designed for rugged and easy use as a field ratio test kit. The connections are meant to handle large test clips. When ratio results of complex transformers are not as expected, the TRS1 provides the end user with field confirmation that the test instrument is working as intended and reporting ratio accurately.

SPECIFICATIONS

Dimensions

144 H x 304 W x 270 D mm

Input Frequency

50 to 240 Hz

Step Down Voltage

< 275V AC

Safety

IEC 61010

Operating Temp

-10°C to 50°C

Weight

5kg

Max Loading

< 5VA

Step Up Voltage

< 8VAC

Vibe/Drop/Shock

MIL-STD-810G

Storage Temp

-30°C to 70°C

		From Calibration Report @ Max V	
Mode	Ratios	Ratio Accuracy	Phase Accuracy
Down	1:1, 2:1, 4:1, 8:1, 16:1, 32:1, 64:1, 128:1	±0.01%	±6 minutes
	256:1, 512:1, 1024:1, 2048:1	±0.01%	±10 minutes
Up	1:1, 2:1, 4:1, 8:1, 16:1, 32:1	±0.01%	±6 minutes

ORDERING INFORMATION

Item (Qty)	Cat. No.
TRS1+ - Step Down + Step Up	TRS1PLUS
TRS1D - Step Down Only	TRS1D
Optional Accessories	
Calibration certificate	CERT-NIST