

# Electronic Potential Divider



**EPD**

## FEATURES

- ◆ Provides flexibility of various VT ratios
- ◆ Eliminates the need to have several Standard VTs
- ◆ Small Ratio and Phase Errors -  $0.05\% \pm 2$  mins
- ◆ Models operating at higher voltages are available.
- ◆ Protected against transients and overload conditions.

## APPLICATIONS

The EPD with its auxiliaries is intended to be used as a standard for calibrating voltage transformers or for general measurements of high voltage at power frequency (50/60 Hz).

The 2570 Electronic Potential Divider (EPD) is an amplifier aided capacitance divider providing an accurate ratio over an output range of 50 to 140 volts. The basic divider configuration requires a high voltage capacitor of suitable capacitance and voltage rating in addition to the Electronic Potential Divider described herein.

The EPD contains a precision ratio divider and a solid state power amplifier to provide up to 12 VA at 120 volts. The instrument is protected against transients and overload conditions.

## SPECIFICATIONS

### ELECTRICAL SPECIFICATIONS

Line Power : 110/230 volts, 50/60 Hz, 50 VA  
 Output Rating : 50-140 volts, 0.1 amperes.  
 Ratio Settings : Multiplier + two dials + 10T potentiometer  
 Accuracy :  $\pm 0.05\%$  and 2 minute at rated condition.

### MECHANICAL SPECIFICATIONS

Dimensions : 17" WIDE, 5" HIGH, 19" DEEP (430 x 130 x 480mm)  
 Weight : 24 lbs. (11 kg), approximately  
 Temperature Range :  $-10^{\circ}\text{C}$  to  $50^{\circ}\text{C}$   
 Humidity : Ambient to 90% RH

### ADDITIONAL SPECIFICATIONS

Isolation : The EPD provides ISOLATION between input and output. Input is referenced with respect to the case ground. The output is floating and either terminal may be grounded to local or Relocate ground.  
 Polarity : The output of the EPD is in phase with the input.  
 Accuracy : Specified accuracy is obtainable when the EPD is calibrated With its high voltage capacitor.  
 Ratios : Ratios are adjustable over a 12 to 1 range of on each multiplier. The accuracy applies over a 12 to 3 range of ratios on each multiplier.  
 Low Ratio Multiplier : Each EPD is equipped with a Low Range with a multiplier of 0.05. This Range provides ratios of 1... 6 to 1. This multiplier is provided from a separate differential input.  
 Multipliers : The EPD is typically equipped with three multipliers in addition to the low ratio multiplier. The multipliers are selected in such a way that the instrument can be easily self checked and calibrated with minimal test equipment.

### AVAILABLE ACCESSORIES

Eltel Industries can offer the Automatic Instrument/Voltage Transformer Test Sets, Potential Burdens as per National/International Standards (with suitable Input Voltages) and Standard Capacitors for use with the EPD.

### OPTIONAL ACCESSORY

The Electronic Potential Divider can be supplied with a Range Extender (1:2). This facilitates user to Test VTs upto 190% of the rated voltage using EPD.

### ORDERING INFORMATION

CAT	RATIO			
Cat. No. 2570	Ratio : 1...6 to 1			
Cat. no. 2570-1	Ratio : 1...6 to 1	10...30 to 1	20...60 to 1	40...120 to 1
Cat. no. 2570-2	Ratio : 1...6 to 1	20...60 to 1	60...180 to 1	180...540 to 1
Cat. no. 2570-3	Ratio : 1...6 to 1	40...120 to 1	100...300 to 1	200...600 to 1
Cat. no. 2570-4	Ratio : 1...6 to 1	60...180 to 1	120...360 to 1	240...720 to 1
Cat. no. 2570-5	Ratio : 1...6 to 1	100...300 to 1	200...600 to 1	400...1200 to 1
Cat. no. 2570-6	Ratio : 1...6 to 1	120...360 to 1	300...900 to 1	600...1800 to 1
Cat. no. 2570-7	Ratio : 1...6 to 1	200...600 to 1	400...1200 to 1	1000...3000 to 1
Cat. no. 2570-8	Ratio : 1...6 to 1	400...1200 to 1	1000...3000 to 1	2000...6000 to 1
Cat. no. 2570-99	CUSTOMS RATIOS			

### OTHER PRODUCTS

- Manual & Automatic Transformer Ratio Meters.
- Digital Micro Ohm Meters with built in 100Amp source.
- Manual & Automatic Transformer Winding Resistance & On Load Tap Changer Test sets.
- Automatic CT/VT Test Sets & Systems.
- Automatic 12 kV & 5 kV Capacitance & Tan Delta Test Sets.
- Relaying Current Transformer Analyser.



#### ELTEL INDUSTRIES

311 Embassy Centre, Crescent Road, Bengaluru 560 001, India

TEL: +91-80-22255467, 22205686, 22284253, 22284298  
 FAX: +91-80-22252733 email: marketing@eltelindustries.com

[www.eltelindustries.com](http://www.eltelindustries.com)

Manufacturing Facility : Plot No. 39, KIADB Industrial Area, Veerapura, Doddaballapur, Bengaluru – 561 203, INDIA.

TEL : 91-80-27630366, 27630367, 27630368, +91-9686693047, +91-9686693048 FAX : 91-80-27630351

GURGAON: 0124-2460619, 099903 88454

HYDERABAD : 08008070840

MUMBAI: 022 - 21713579, 07045604020

KOLKATA: 033-24765536, 09830067236, 09331094257

VADODARA: 08155987799

ELTEL FEB. 2018

Eltel Industries, established in 1983, is a market leader in the development and manufacturing of test instruments for electrical power industries and utilities. We are pleased to announce the NABL-accreditation of the Eltel Industries Calibration Laboratory (including on-site calibrations) in electro-technical discipline in accordance to ISO/IEC:17025/2005.