



# **LaCoste & Romberg**

*The first name in gravity since 1939*

## **Portable Earth-Tide Meter**

LaCoste and Romberg, manufacturer of precision gravity meters since 1939, is the leader in earth tide instrumentation. These sensors are especially valuable in long period, high sensitivity earth tide monitoring applications. L&R first introduced earth tide meters in 1952. Many LaCoste and Romberg earth tide meters have been installed in geophysical observatories worldwide. The Model PET earth tide meter is smaller and more portable than previous models.

The principle behind L&R's PET Meter is the famous patented L&R zero-length™ spring suspension system. The PET Meter is based upon the G-Meter, but with significant upgrades designed specifically for earth tide use. It has an improved thermal system - a double-oven - for more precise temperature stability. It employs the Aliod Beam Nulling system for precise digital measurement of gravity at .0001 mGal resolution. L&R's user-friendly TIDEAQ software allows for unattended operation and data logging.



*The TIDEAQ acquisition system allows for continuous unattended monitoring of earth tide measurements.*

- ◆ **Aliod Beam Nulling System:** Electronic feedback system for precise digital measurement with a resolution of 0.0001 mGals
- ◆ **TideDaq:** L&R Software for recording PET meter output allowing automated, unattended earth tide monitoring. TideDaq displays Realtime plots and records data. Data recorded: Location, Time, Date, Raw Gravity, Sensor Temp., Outer Oven Temp., Atmospheric Pressure, Cross and Long Level, Cross and Long Level Correction.
- ◆ **Computer:** L&R provided computer has our TideDaq data acquisition software preinstalled.
- ◆ **Transportation case**

## PET METER SPECIFICATIONS

### System Performance

System Resolution 0.0001 mGal  
 System Accuracy 0.001 mGal or better  
 System Noise 0.006 mGal/ $\sqrt{\text{Hz}}$  or better

Drift: 1.5 mGal (or better) per month when new,  
 with aging drift values are usually less than  
 0.5 mGals per month

Range: 7,000 mGal uncalibrated (worldwide)

### Size and Weight

Size: 13 x 10.5 x 18 inch; 33 x 26.6 x 45.7 cm  
 Weight: 37 lbs; 13.8 kg (without computer and accessories)

Uses 12 VDC at 2 amp(max).  
 Includes external battery charger 110/230 VAC

### Warranty

All new PET meters come with a two-year warranty on parts and labor.

*Specifications are subject to change*



## **LaCoste & Romberg**

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