# Summary Sheet for PASSCAL Sensor Guralp CMG-40T



#### Channel Order:

(Positive voltage on digitizer channel means ground moved in given direction.)1 Up0. North

2 North

3 East

## Sensitivity:

800 Volts/meter/second

## Step Calibration:

If needed in the field, consult the PIC Calibration Guide

#### **Physical Characteristics:**

Size: cylinder 16.8 cm diameter, 23 cm height Weight: 6.9 kg Shipping Weight: 16.8 kg Shipping Box Size: 36 x 36 x 53 cm Power Consumption: 50 mA @ 12VDC Frequency Response:

Natural Freq. 0.033 Hz (30 seconds) Damping 0.707 critical Zeros two at zero Poles  $0.149 + 0.149\iota$  $-0.149 - 0.149\iota$ 

#### Installation Tips: (See also the Guralp Field Note. Below are TIPS not instructions.)

- 1. The sensor pad should be within 5° of level, marked with a line oriented North/South. Construction of the sensor enclosure is critical to data quality. See Field Note on Vault Construction.
- 2. Align the sensor using small the small pointers extending from the base. Double check that the N mark stamped on the sensor base corresponds to the brass pointer, align this to North. The silver pointer aligns to South. Level the sensor by adjusting the feet until the bubble in the spirit level lies entirely within the inner circle. When level, twist the foot lock ring against the base of the sensor to lock the foot and keep it from turning.
- Attach the sensor to digitizer cable (26 socket to either 19-pin for RT130 or 26-pin for Q330). Secure the sensor cable so
  that tugs on it (inadvertent or otherwise) do not budge the sensor and it does not wiggle around near the sensor or touch the
  sensor enclosure. If the digitizer is powered, the sensor will be powered once it is connected to the digitizer.
- 4. No mass unlocking is necessary. However, handle the sensor with care, as careless handling can still damage the unit.
- 5. Check the mass position voltages with the DAS (see Station Installation sheet). Mass positions should optimally be within +/- 2.0 Volts; if readings are higher, consult the "Mass Position Adjustments" in the Guralp Field Note.
- 6. Note the serial number of the sensor. Cover the sensor with insulation. Insulate the vault and close the vault.
- 7. When the area is secure and quiet, check the mass position voltages again before leaving the site.

## Contents of a Guralp CMG-40T Shipping Box:

- 1. CMG-40T sensor
- 2. Sensor to digitizer cable (either 19-pin to 26-socket for RT130 digitizer or 26-pin to 26-socket for Q330 digitizer)