

CMG-1T CALIBRATION SHEET

WORKS ORDER: 4718 DATE: 16-Oct-2009

SERIAL NUMBER: T1049 TESTED BY: S. Goddard

| | Velocity Output V/m/s (Differential) | Mass Position Output (Acceleration output) V/m/s ² | Feedback Coil Constant Amp/m/s ² |
|-------------|---|---|---|
| VERTICAL | 2 x 3153 | 1410 | 0.0047 |
| NORTH/SOUTH | 2 x 3169 | 1428 | 0.00476 |
| EAST/WEST | 2 x 3169 | 1443 | 0.00481 |

Power Consumption: 60mA @ +12V input
Calibration Resistor: 51000

NOTE: A factor of 2 x must be used when the sensor outputs are used differentially (also known as push-pull or balanced output). Under no conditions should the negative outputs be connected to the signal ground. A separate signal ground pin is provided.

POLES AND ZEROS TABLE

WORKS ORDER NUMBER: 4718

SENSOR SERIAL NO: T1049

Velocity response output, Vertical Sensor:

| <u>POLES (HZ)</u> | <u>ZEROS HZ</u> |
|---|-----------------|
| $-1.964 \times 10^{-3} \pm j1.964 \times 10^{-3}$ | 0 |
| -30.0529±j31.1211 | 0 |
| -41.2564±j114.535 | |

Normalizing factor at 1 Hz: A = 27.7×10^6

Sensor Sensitivity: See Calibration Sheet.

Velocity response output, Horizontal Sensors:

| <u>POLES (HZ)</u> | <u>ZEROS (HZ)</u> |
|---|-------------------|
| $-1.964 \times 10^{-3} \pm j1.964 \times 10^{-3}$ | 0 |
| -30.0529±j31.1211 | 0 |
| -41.2564±j114.535 | |

Normalizing factor at 1 Hz: A = 27.7×10^6

Sensor Sensitivity: See Calibration Sheet.

NOTE: The above poles and zeros apply to the vertical and the horizontal sensors and are given in units of Hz. To convert to Radian/sec multiply each pole or zero with 2π . The normalizing factor A should also be recalculated.