

DM24 CALIBRATION

WORKS ORDER: 4318

DIGITISER SERIAL NUMBER: C788

SENSOR SERIAL NUMBER: T35363

SYSTEM ID: 4318

UNIT ID: 5363

OUTPUT DATA FORMAT: GCF

BAUD RATE: 38400

BOOTLOADER: BOOT1030.IMG

DSP SOFTWARE: DSPSI1060.BIN

SYSTEM: ARMFWDM103b70.IMG

VELOCITY CHANNELS

Channel:	5363Z2	Vertical	3.201 $\mu\text{V}/\text{Count}$	536.877E-12 M/S/Count
	5363N2	North/South	3.198 $\mu\text{V}/\text{Count}$	535.212E-12 M/S/Count
	5363E2	East/West	3.197 $\mu\text{V}/\text{Count}$	533.581E-12 M/S/Count

MASS POSITION CHANNELS

Sample Rate: 4 samples/sec (Default)

Channel:	5363M8	Vertical	303.26 $\mu\text{V}/\text{Count}$	361.451E-9 M/S ² /Count
	5363M9	North/South	304.67 $\mu\text{V}/\text{Count}$	344.653E-9 M/S ² /Count
	5363MA	East/West	304.65 $\mu\text{V}/\text{Count}$	342.303E-9 M/S ² /Count

Sample Rate: 1 samples/sec

Channel:	5363M8	Vertical	1.18 $\mu\text{V}/\text{Count}$	1.412E-9 M/S ² /Count
	5363M9	North/South	1.19 $\mu\text{V}/\text{Count}$	1.346E-9 M/S ² /Count
	5363MA	East/West	1.19 $\mu\text{V}/\text{Count}$	1.337E-9 M/S ² /Count

CAL SIGNAL MONITOR

5363X2 / 5363C2 3.208 $\mu\text{V}/\text{Count}$

GPS RECEIVER

PWM: 8000 Counts

At Temperature Reading: 23°C

POWER CONSUMPTION

Digitiser Power Consumption

80mA @ 12v

GPS Power Consumption

28mA @ 12v

CMG-3ESP CALIBRATION SHEET

WORKS ORDER: 4318 DATE: 14-Feb-2008
SERIAL NUMBER: T35363 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 2981	839	0.01785
NORTH/SOUTH	2 x 2988	884	0.01881
EAST/WEST	2 x 2996	890	0.01894

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: 4318

SENSOR SERIAL NO: T35363

Velocity response output, Vertical Sensor:

<u>POLES (HZ)</u>	<u>ZEROS HZ</u>
$-7.07 \times 10^{-3} \pm j7.07 \times 10^{-3}$	0
-180	0
-160	
-80	

Normalizing factor at 1 Hz: A = 2304000

Sensor Sensitivity: See Calibration Sheet.

Velocity response output, Horizontal Sensors:

<u>POLES (HZ)</u>	<u>ZEROS (HZ)</u>
$-7.07 \times 10^{-3} \pm j7.07 \times 10^{-3}$	0
-180	0
-160	
-80	

Normalizing factor at 1 Hz: A = 2304000

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.