

# TEST AND CALIBRATION DATA

**Short Period OBS System** 

Serial No. T6J77/A4336/5173

#### DESIGNED AND MANUFACTURED BY:

GÜRALP SYSTEMS LIMITED
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#### **DM24 CALIBRATION**

WORKS ORDER: 13072 DIGITISER SERIAL NUMBER: A4336

SYSTEM ID: 13072 CPLD: A0.E1

UNIT ID: 4336 BOOTLOADER: MK3BOOT213.IMG

OUTPUT DATA FORMAT: GCF DSP SOFTWARE: DSP1090.BIN

BAUD RATE: 38400 SYSTEM: DMNET106b57d.IMG

**VELOCITY CHANNELS** 

Channel: 4336Z2 Vertical 2.872 µV/Count

4336N2 North/South 2.873  $\mu$ V/Count 4336E2 East/West 2.874  $\mu$ V/Count

MASS POSITION CHANNELS

Sample Rate: 4 samples/sec (Default)

Channel: 4336M8 Vertical 291.022 µV/Count

4336M9 North/South 290.358 μV/Count 4336MA East/West 290.166 μV/Count

Sample Rate: 1 samples/sec

Channel: 4336M8 Vertical 2.274 µV/Count

4336M9 North/South 2.268  $\mu$ V/Count 4336MA East/West 2.267  $\mu$ V/Count

CAL SIGNAL MONITOR

4336X2 2.873 μV/Count 4336C2 0.424 μV/Count

**GPS RECEIVER** 

PWM: 8000 Counts

At Temperature Reading: 23°C

**POWER CONSUMPTION** 

Digitiser Power Consumption 80mA @ 12v GPS Power Consumption 28mA @ 12v

#### **AUXILIARY CHANNELS**

Sample Rate: 4 samples/sec (Default)

Channel: 4336MB  $290.572 \mu V/Count$ 

 $\begin{array}{ccc} 4336MC & 290.102 \; \mu V/Count \\ 4336MD & 291.022 \; \mu V/Count \\ 4336ME & 290.893 \; \mu V/Count \\ 4336MF & 291.151 \; \mu V/Count \end{array}$ 

Sample Rate: 1 samples/sec

Channel: 4336MB  $2.270 \mu V/Count$ 

 $\begin{array}{ccc} 4336MC & 2.266 \; \mu V/Count \\ 4336MD & 2.274 \; \mu V/Count \\ 4336ME & 2.273 \; \mu V/Count \\ 4336MF & 2.275 \; \mu V/Count \end{array}$ 

#### **CMG-6TF CALIBRATION SHEET**

WORKS ORDER:

13072

DATE:

18-Mar-2013

SERIAL NUMBER:

T6J77

TESTED BY:

S. Goddard

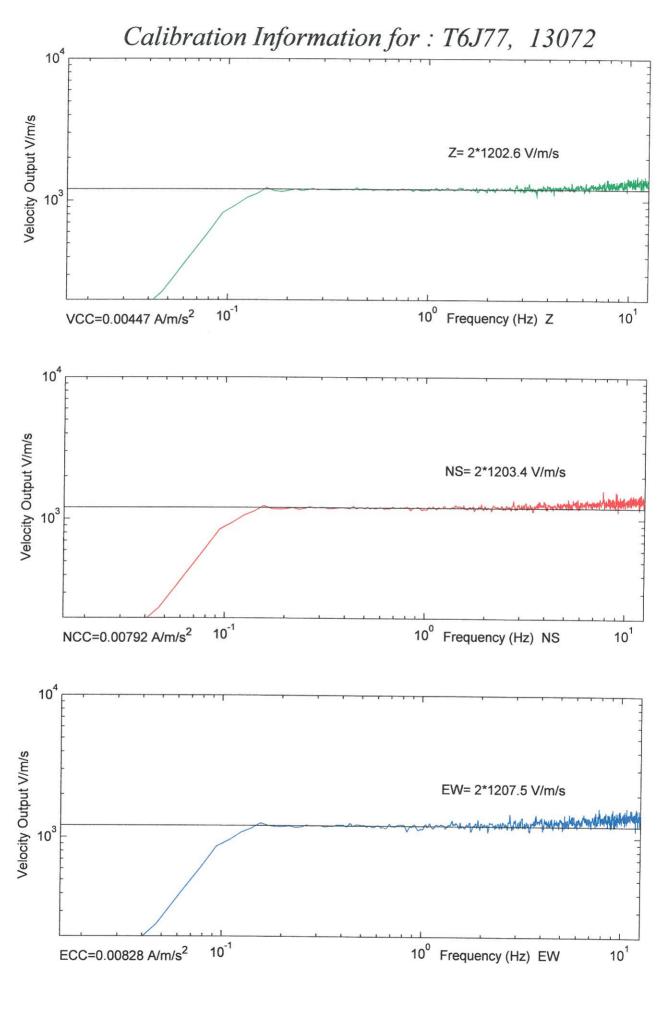
	Velocity Output V/m/s (Differential)	Mass Position Output (Acceleration output) V/m/s <sup>2</sup>	Feedback Coil Constant Amp/m/s <sup>2</sup>
VERTICAL	2 x 1203	447	0.00447
NORTH/SOUTH	2 x 1203	404	0.00792
EAST/WEST	2 x 1208	422	0.00828

Power Consumption:

20mA @ +12V input

Calibration Resistor:

51000



### Normalized Frequency Response for: T6J77, 13072 Magnitude (dB) -20 -40 10<sup>-1</sup> 10<sup>0</sup> (-2.9dB@0.102Hz) Frequency (Hz) Z 100 Phase (deg) 0 -100 10<sup>-2</sup> (87.7deg@0.102Hz) 10<sup>-1</sup> Frequency (Hz) Z Magnitude (dB) -20 -40 10<sup>-1</sup> 10<sup>-2</sup> (-2.6dB@0.102Hz) 10<sup>0</sup> Frequency (Hz) NS Phase (deg) 0 01-001-10<sup>-1</sup> 10<sup>-2</sup> (86.1deg@0.102Hz) 10<sup>0</sup> Frequency (Hz) NS Magnitude (dB) -20 10<sup>-2</sup> (-2.4dB@0.102Hz) 10<sup>-1</sup> 10<sup>0</sup> Frequency (Hz) EW Phase (deg) 100 -100

10<sup>-2</sup> (86.0deg@0.102Hz)

10<sup>-1</sup>

Frequency (Hz) EW

10<sup>0</sup>

# Normalized Frequency Response for: T6J77, 13072 Magnitude (dB) -20 -40 10<sup>0</sup> 10<sup>1</sup>Frequency (Hz) Z (-3.9dB@0.500Hz) Dhase (deg) 0 -100 10<sup>-1</sup> (90.4deg@0.500Hz) 10<sup>0</sup> 10<sup>1</sup>Frequency (Hz) Z Magnitude (dB) -20 -40 10<sup>0</sup> 10<sup>-1</sup> (-3.7dB@0.500Hz) 10<sup>1</sup>Frequency (Hz) NS Dhase (deg) 0 001-10<sup>-1</sup> (87.4deg@0.500Hz) 10<sup>0</sup> 101Frequency (Hz) NS Magnitude (dB) -20 10<sup>-1</sup> (-3.9dB@0.500Hz) 10<sup>0</sup> 10<sup>1</sup>Frequency (Hz) EW Phase (deg) 100 -100

10<sup>0</sup>

10<sup>-1</sup> (87.2deg@0.500Hz)

10<sup>1</sup>Frequency (Hz) EW

# Normalized Frequency Response for: T6J77, 13072 Magnitude (dB) -20 -40 10<sup>0</sup> 10<sup>-1</sup> (-3.6dB@1.000Hz) 10<sup>1</sup>Frequency (Hz) Z Phase (deg) 0 01-10<sup>-1</sup> (90.6deg@1.000Hz) 10<sup>0</sup> 10<sup>1</sup>Frequency (Hz) Z Magnitude (dB) -20 -40 10<sup>-1</sup> (-2.6dB@1.000Hz) 10<sup>0</sup> 10<sup>1</sup>Frequency (Hz) NS Phase (deg) 0 01-10<sup>-1</sup> (87.4deg@1.000Hz) 10<sup>0</sup> 101Frequency (Hz) NS Magnitude (dB) -20 10<sup>-1</sup> (-3.3dB@1.000Hz) 10<sup>0</sup> 10<sup>1</sup>Frequency (Hz) EW Phase (deg) 100 -100

10<sup>0</sup>

10<sup>-1</sup> (87.4deg@1.000Hz)

10<sup>1</sup>Frequency (Hz) EW

### Normalized Frequency Response for: T6J77, 13072 Magnitude (dB) -20 -40 10<sup>0</sup> (-6.3dB@100Hz) 10<sup>2</sup> Frequency (Hz) Z Phase (deg) 0 01-10<sup>0</sup> (-131.9deg@100Hz) 10<sup>1</sup> Frequency (Hz) Z 10<sup>2</sup> Magnitude (dB) -20 -40 10<sup>0</sup> (-1.4dB@100Hz) 10<sup>2</sup> Frequency (Hz) NS Phase (deg) 0 01-10<sup>0</sup> (-55.0deg@100Hz) 10<sup>1</sup> Frequency (Hz) NS 10<sup>2</sup> Magnitude (dB) -20 10<sup>0</sup> (-1.1dB@100Hz) 10<sup>2</sup> 10<sup>1</sup> Frequency (Hz) EW Phase (deg) 100 0 -100 10<sup>0</sup> (-101.2deg@100Hz) 10<sup>1</sup> Frequency (Hz) EW 10<sup>2</sup>