

TEST AND CALIBRATION DATA

Short Period OBS System

Serial No. T6J74/A4331/5170

DESIGNED AND MANUFACTURED BY:

GÜRALP SYSTEMS LIMITED
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DM24 CALIBRATION

WORKS ORDER: 13072 DIGITISER SERIAL NUMBER: A4331

SYSTEM ID: 13072 CPLD: A0.E1

UNIT ID: 4331 BOOTLOADER: MK3BOOT213.IMG

OUTPUT DATA FORMAT: GCF DSP SOFTWARE: DSP1090.BIN

BAUD RATE: 38400 SYSTEM: DMNET106b57d.IMG

VELOCITY CHANNELS

Channel: 4331Z2 Vertical 2.874 µV/Count

 $\begin{array}{cccc} 4331N2 & North/South & 2.873 \; \mu V/Count \\ 4331E2 & East/West & 2.874 \; \mu V/Count \end{array}$

MASS POSITION CHANNELS

Sample Rate: 4 samples/sec (Default)

Channel: 4331M8 Vertical 291.646 µV/Count

4331M9 North/South 291.797 μV/Count 4331MA East/West 291.236 μV/Count

Sample Rate: 1 samples/sec

Channel: 4331M8 Vertical 2.278 µV/Count

4331M9 North/South 2.280 μ V/Count 4331MA East/West 2.275 μ V/Count

CAL SIGNAL MONITOR

4331X2 2.875 μV/Count

4331C2 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)
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Channel:	4331MB	291.495 μV/Count
	4331MC	291.215 μV/Count
	4331MD	291.129 μV/Count
	4331ME	291.000 μV/Count
	4331MF	291.150 μV/Count

Sample Rate: 1 samples/sec

Channel: 4331MB 2.277 μ V/Count

 $\begin{array}{cccc} 4331MC & 2.275 \; \mu\text{V/Count} \\ 4331MD & 2.274 \; \mu\text{V/Count} \\ 4331ME & 2.273 \; \mu\text{V/Count} \\ 4331MF & 2.275 \; \mu\text{V/Count} \end{array}$

CMG-6TF CALIBRATION SHEET

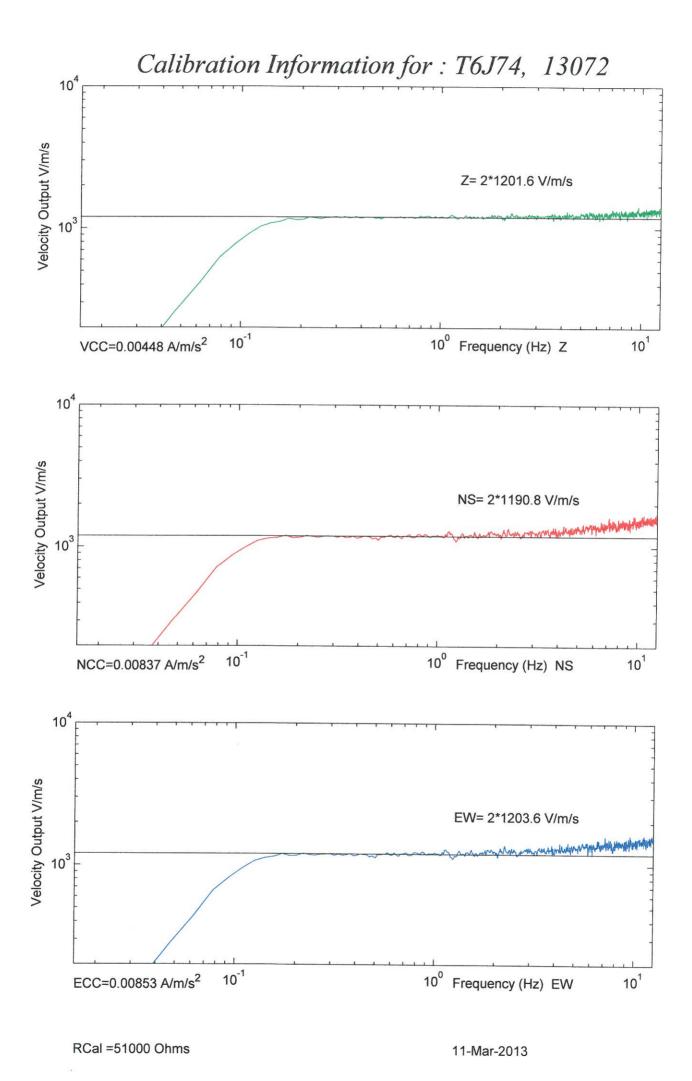
WORKS ORDER: 13072 DATE: 11-Mar-2013

SERIAL NUMBER: T6J74 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 1202	448	0.00448
NORTH/SOUTH	2 x 1191	427	0.00837
EAST/WEST	2 x 1204	435	0.00853

Power Consumption: 20mA @ +12V input

Calibration Resistor: 51000



Normalized Frequency Response for: T6J74, 13072 Magnitude (dB) -20 -40 10⁻¹ 10⁰ (-3.0dB@0.102Hz) Frequency (Hz) Z 100 Phase (deg) -100 10⁻² (87.7deg@0.102Hz) 10⁻¹ Frequency (Hz) Z Magnitude (dB) 0 -20 -40 10⁻² (-2.7dB@0.102Hz) 10⁻¹ 10⁰ Frequency (Hz) NS Phase (deg) 0 001-10⁻¹ 10⁻² (85.0deg@0.102Hz) 10⁰ Frequency (Hz) NS Magnitude (dB) -20 -40 10⁻² (-3.1dB@0.102Hz) 10⁻¹ 10⁰ Frequency (Hz) EW Phase (deg) 100 -100

10⁻² (87.8deg@0.102Hz)

10⁻¹

Frequency (Hz) EW

10⁰

Normalized Frequency Response for: T6J74, 13072 Magnitude (dB) -20 -40 10⁰ 10¹Frequency (Hz) Z (-3.3dB@0.500Hz) 100 Phase (deg) 0 -100 10⁻¹ (88.8deg@0.500Hz) 10⁰ 10¹Frequency (Hz) Z Magnitude (dB) -20 -40 10⁻¹ (-2.4dB@0.500Hz) 10⁰ 10¹Frequency (Hz) NS Phase (deg) 0 001 10⁻¹ (86.3deg@0.500Hz) 10⁰ 10¹Frequency (Hz) NS Magnitude (dB) -20 10⁻¹ (-2.4dB@0.500Hz) 10⁰ 10¹Frequency (Hz) EW Phase (deg) 100 -100 10⁻¹ (88.9deg@0.500Hz)

10⁰

10¹Frequency (Hz) EW

Normalized Frequency Response for: T6J74, 13072 Magnitude (dB) -20 -40 10⁰ 10¹Frequency (Hz) Z (-3.8dB@1.000Hz) 100 Phase (deg) -100 10⁰ 10⁻¹ (88.9deg@1.000Hz) 10¹Frequency (Hz) Z Magnitude (dB) -20 -40 10⁻¹ (-3.0dB@1.000Hz) 10⁰ 10¹Frequency (Hz) NS Phase (deg) 0 01-10⁰ 10⁻¹ (85.2deg@1.000Hz) 101Frequency (Hz) NS Magnitude (dB) -20 10⁻¹ (-2.8dB@1.000Hz) 10⁰ 10¹Frequency (Hz) EW Phase (deg) 100 -100 10⁻¹ (87.3deg@1.000Hz) 10⁰ 101Frequency (Hz) EW

