Appendix: C 3
DAE calibration Data

DAE 3 SN: 577

DATE: 28.07.2003

1. Cal Lab. Incoming Inspection & Pre Test

Modification Status	Note Status here → → → →	BC
Visual Inspection	Note anomalies.....	None
	.....	.....
Pre Test	**Indication**	**Yes/No**
Probe Touch	Function	Yes
Probe Collision	Function	Yes
Probe Touch&Collision	Function	Yes

2. DC Voltage Measurement

A/D - Converter Resolution nominal

High Range: 1LSB = 6.1μV , full range = 400 mV
Low Range: 1LSB = 61nV , full range = 4 mV

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

Calibration Factors	**X**	**Y**	**Z**
High Range rounded to 7 digits	404.4222	403.8795	404.3349
Low Range rounded to 6 digits	3.94199	3.94728	3.94958
Connector Angle to be used	in DASY System	102 °	

High Range	**Input**	**Reading in μV**	**% Error**
Channel X + Input	200mV	199999.6	0.00
	20mV	20001.4	0.01
Channel X - Input	20mV	-19992.8	-0.04
Channel Y + Input	200mV	200000.3	0.00
	20mV	20000.2	0.00
Channel Y - Input	20mV	-19994.8	-0.03
Channel Z + Input	200mV	200000.8	0.00
	20mV	19998.2	-0.01
Channel Z - Input	20mV	-19997.3	-0.01

Low Range	**Input**	**Reading in μV**	**% Error**
Channel X + Input	2mV	2000	0.00
	0.2mV	199.7	-0.15
Channel X - Input	0.2mV	-200.1	0.05
Channel Y + Input	2mV	2000	0.00
	0.2mV	199.8	-0.10
Channel Y - Input	0.2mV	-200.8	0.40
Channel Z + Input	2mV	1999.9	0.00
	0.2mV	199.1	-0.45
Channel Z - Input	0.2mV	-201.2	0.60

3. Common mode sensitivity

DASY measurement parameters:
Auto Zero Time: 3 sec, Measuring time: 3 sec
High/Low Range

in μV	Common mode Input Voltage	High Range Reading	Low Range Reading
Channel X	200mV	12.27	11.77
	- 200mV	-11.19	-11.53
Channel Y	200mV	-7.87	-7.70
	- 200mV	7.62	6.23
Channel Z	200mV	-1.26	-1.22
	- 200mV	0.39	-0.42

4. Channel separation

DASY measurement parameters:
Auto Zero Time: 3 sec, Measuring time: 3 sec
High Range

in μV	Input Voltage	Channel X	Channel Y	Channel Z
Channel X	200mV	-	1.68	-0.01
Channel Y	200mV	0.91	-	3.02
Channel Z	200mV	-0.86	0.65	-

5. AD-Converter Values with inputs shorted

in LSB	Low Range	High Range
Channel X	16222	15957
Channel Y	16297	15956
Channel Z	15820	16260

6. Input Offset Measurement

DASY measurement parameters:
Auto Zero Time: 3 sec, Measuring time: 3 sec
Number of measurements: 100, Low Range

Input 10MΩ

in μV	Average	min. Offset	max. Offset	Std. Deviation
Channel X	0.48	-0.63	2.82	0.57
Channel Y	-2.49	-3.89	-0.37	0.52
Channel Z	-0.28	-1.10	0.74	0.32

6. Input Offset Measurement (cont'd)

Input shorted

in μV	Average	min. Offset	max. Offset	Std. Deviation
Channel X	0.06	-1.37	1.16	0.45
Channel Y	-0.67	-1.83	0.38	0.40
Channel Z	-0.83	-1.68	0.35	0.25

7. Input Offset Current

Nominal Input circuitry offset current on all channels: <25fA

8. Input Resistance

In MOhm	Calibrating	Measuring
Channel X	0.1999	199.8
Channel Y	0.2000	200.4
Channel Z	0.1999	199.6

9. Low Battery Alarm Voltage

in V	Alarm Level
Supply (+ Vcc)	7.58
Supply (- Vcc)	-7.65

10. Power Consumption

in mA	Switched off	Stand by	Transmitting
Supply (+ Vcc)	0	5.62	13.4
Supply (- Vcc)	-0.011	-7.70	-9.0