

Program Version:

Product: Oxygen Optode 4831

Serial No: 728

Visual and Mechanical Checks:

- 1.1 Soldering quality
- 1.2 Visual surface
- 1.3 Galvanic isolation between housing and electronics

Current Drain and Voltages:

2.1	Average current drain at 0.5 Hz sampling (Max.: 33 mA)	23.4	mA
2.2	CANBus Current drain at 0.5 Hz sampling (Max.: 33 mA)		mA
2.3	Current drain in sleep (Max.: 180 μ A)	211	μ A
2.4	CANBus Current drain in sleep (Max.: 180 μ A)		μ A
2.5	DSP IO voltage, J4.18 (3.3 $\pm$ 0.15V)		V
2.6	DSP Core voltage, J4.17(1.8 $\pm$ 0.05 V)	1.83	V
2.7	Excitation driver voltage, C4 Analog Board (4.5 $\pm$ 0.15 V)	4.33	V

Performance test:

	Channel:	Blue	Red
3.1	Average of Receiver readings (0 $\pm$ 150mV)	-16.6 mV	-4.8 mV
3.2	Standard Deviation of Receiver readings (Max.: 45mV/10mV)	9.07 mV	2.05 mV
3.3	Amplitude measm. with non-fluorescence foil (<60mV/650-1200mV)	12.4 mV	919.2 mV
3.4	CANBus Output test		

Function test from 0 to 40°C:

	Channel:	Blue	Red
4.1	Minimum amplitude measurement (Blue: >550 mV, Red >650 mV)	622.6 mV	666.6 mV
4.2	Maximum amplitude measurement (Blue: <1600 mV, Red <1400 mV)	994.7 mV	1170.2 mV
4.3	Minimum phase measurement (Blue: >24°, Red: >1°)	34.82 °	4.88 °
4.4	Maximum phase measurement (Blue: <34°, Red: <5°)	41.01 °	6.68 °
4.5	Maximum standard deviation of Phase measurement: (< 0.02°)	0.05 °	0.04 °
4.6	Minimum temperature raw data measurement: (<-200 mV)		-499.5 mV
4.7	Maximum temperature raw data measurement: (>450 mV)		716.5 mV

Pressure test :

5.1	Pressure (IW version: 20MPa, DW version 60MPa)	60MPa
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Date: 04 Jan 2018

Sign:

Laila A. Skålnes

Laila Skålnes, Production Engineer

Program Version:

Product: Oxygen Optode 4831

Serial No: 729

Visual and Mechanical Checks:

- 1.1 Soldering quality
- 1.2 Visual surface
- 1.3 Galvanic isolation between housing and electronics

Current Drain and Voltages:

2.1	Average current drain at 0.5 Hz sampling (Max.: 33 mA)	23.0	mA
2.2	CANBus Current drain at 0.5 Hz sampling (Max.: 33 mA)		mA
2.3	Current drain in sleep (Max.: 180 μ A)	237	μ A
2.4	CANBus Current drain in sleep (Max.: 180 μ A)		μ A
2.5	DSP IO voltage, J4.18 (3.3 $\pm$ 0.15V)		V
2.6	DSP Core voltage, J4.17(1.8 $\pm$ 0.05 V)	1.81	V
2.7	Excitation driver voltage, C4 Analog Board (4.5 $\pm$ 0.15 V)	4.35	V

Performance test:

	Channel:	Blue	Red
3.1	Average of Receiver readings (0 $\pm$ 150mV)	-11.2 mV	-10.6 mV
3.2	Standard Deviation of Receiver readings (Max.: 45mV/10mV)	0.68 mV	0.76 mV
3.3	Amplitude measm. with non-fluorescence foil (<60mV/650-1200mV)	12.8 mV	1020.6 mV
3.4	CANBus Output test		

Function test from 0 to 40°C:

	Channel:	Blue	Red
4.1	Minimum amplitude measurement (Blue: >550 mV, Red >650 mV)	641.3 mV	711 mV
4.2	Maximum amplitude measurement (Blue: <1600 mV, Red <1400 mV)	1017.6 mV	1251.8 mV
4.3	Minimum phase measurement (Blue: >24°, Red: >1°)	33.87 °	6.33 °
4.4	Maximum phase measurement (Blue: <34°, Red: <5°)	40.12 °	8 °
4.5	Maximum standard deviation of Phase measurement: (< 0.02°)	0.07 °	0.05 °
4.6	Minimum temperature raw data measurement: (<-200 mV)		-384.4 mV
4.7	Maximum temperature raw data measurement: (>450 mV)		830.6 mV

Pressure test :

5.1	Pressure (IW version: 20MPa, DW version 60MPa)	60MPa
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Date: 04 Jan 2018

Sign:

Laila A. Skålnes

Laila Skålnes, Production Engineer