# EMC test laboratory, ELEMCOM Ltd 190008, Saint-Petersburg, Lotsmanskaya str., 3

Certificate
AKP.0103-18 RMF
Ministry of transport of the
Russian federation
valid until 01.03.2011

Recognition certificate 06.00998.011 Russian maritime register of shipping valid until 21.06.2011

Recognition certificate 2621 Russian river register valid until 20.02.2009

> APPROVED General director ELEMCOM Ltd.

A. Worshevsky "13" January 2009 г.

#### EMC TEST REPORT N 90102

**Dive PPO2 Monitor** 

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The test results in this report apply only to tested sample of EUT)

number of pages - 4

Saint-Petersburg 2009 Γ

Certificate № 06.00998.011	EMC test laboratory Elemcom Ltd	No. 90102
Certificate № AKP.0103-18 RMF		Page 2 of 5

Equipment Under Test (EUT): Dive Monitor

Model: PPO2 Serial number: PP001



Manufacturer: EMA Ltd, Zetland Road, Hillington Industrial Estate,

Glasgow, Scotland G52 4BW

Applicant (Design Authority): Deep Life Ltd, 9-11 Jubilee House, Saltire

Business Park, Glenrothes, Scotland. KY6 2AH

OEM (Sales and Branding): Open Safety Equipment Ltd, Zetland Road,

Hillington Industrial Estate, Glasgow, Scotland G52 4BW

Power Requirements: Battery

Date of Receipt of EUT: 30.12.2008

Date of Testing 30.12.2008, 06.01.2008

Tested according to: EN 61000-6-1

EN 61000-6-3

Ambient condition: Temperature 17-20°C, Humidity 32-52%, Atm. Pressure 762-778

mm

Test Site: EMC Test laboratory, Elemcom Ltd, Lotsmanskaya 3,

Saint-Petersburg, Russia

Certificate № 06.00998.011	EMC test laboratory Elemcom Ltd	No. 90102
Certificate № AKP.0103-18 RMF	,	Page 3 of 5

Certificate № 06.00998.011	EMC test laboratory Elemcom Ltd	No. 90102
Certificate № AKP.0103-18 RMF	, and the second	Page 4 of 5

# **Test equipment**

Type of Test Equipment	Manufacture	Calibration certificate	Calibrated till
ESD Simulator ESR-8000K, No 22	Elemcom Ltd	No 432-907-2008	April 2010
Electromagnetic field Simulator UEMP-0,15-2000	Elemcom Ltd	No 433-2797-2008	October 2010
Magnetic Field Simulator IMP-1000, No 8	Elemcom Ltd	No 432-1664-2007	July 2009
Spectrum Analyser 2399B, No I06052036	IFR	No 0099659	June 2009
Antenna Π6-61, No 40-05	OAO MNIPI	No 3217/2400	June 2009
Antenna Π6-62, No 40-05	OAO MNIPI	No 3218/2400	June 2009

Modes of EUT operation: The Dive PPO2 monitor was demonstrated by showing a PPO2 of

around 0.209 when exposed to the room atmosphere, and decreased by up to 0.04 when breathed into it. The status indicators were

updated regularly, showing the device had not hung.

Performance criteria: A. Normal performance within the specification limits. No change of

operation state.

## **Immunity Test Result**

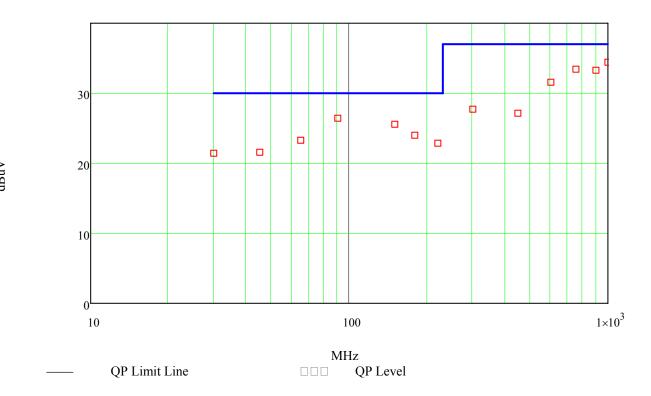
Type of interference	Port of equipment	Port of equipment Value	
Electrostatic discharge EN 61000-4-2	Case (all buttons, all screw,	Contact ± 4	Pass
	all metal path, underwater connector pens, LED lenses)	Air ± 8	Pass
Electromagnetic field EN 61000-4-3	Case	80-1000 MHz 3 V/m 80 % AM 1 kHz sinus	Pass
Magnetic field EN 61000-4-8	Case	3A/m 50 Hz	Pass

Remarks: No change of operating state.

Certificate № 06.00998.011	EMC test laboratory Elemcom Ltd	No. 90102
Certificate № AKP.0103-18 RMF	,	Page 5 of 5

## **Radiated Emission Test Result**

Test standart: CISPR 22



Freq (MHz)	QP (dBuV/m)	Limit (dBuV/m)	Margin (dB)
30	21.4	30	8.6
45	21.6	30	8.4
65	23.3	30	6.7
90	26.5	30	3.5
150	25.6	30	3.4
180	24	30	6
220	22.9	30	7.1
300	27.7	37	9.3
450	27.1	37	9.9
600	31.6	37	5.4
750	33.5	37	3.5
900	33.3	37	3.7
1000	34	37	3.0

Conclusion: The Dive PPO2 Monitor s/n PP001 has been tested in accordance EN 61000-6-1 and EN 61000-6-3 and passed.

Test engineer P.A. Vorshevskiy