

EMC TEST CERTIFICATE

YORK EMC SERVICES (2007) Ltd
DONIBRISTLE INDUSTRIAL PARK
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UKAS Testing Number 1574

Issued to: -	Deep Life Ltd King's Gate Lodge Dalkeith Edinburgh EH22 1ST	Order No. 009/10UK/VERI
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Electromagnetic Compatibility Test/s were performed on the apparatus as detailed: -

Description	OR_Umbilical dual eCCR complete with ORT6100 Umbilical Terminator, fitted with ORM8100 iCCR PP02 Monitor, ORM8200 PPCO2 Monitor and ORS 6400 ALVBOV Diver Display with Active Warning Device		
Type number	None		
Serial Number/s	None		
Configuration/ Mode of Operation	The EUT was battery powered and tested in normal running mode		
Date received	03 March 2010	Date Tested	03-04 March 2010
Specification/s	EN61000-6-3: 2007	Electromagnetic Compatibility (EMC) Part 6-3: Generic standards — Emission standard for residential, commercial and light-industrial environments	
	EN61000-6-2: 2005	Electromagnetic Compatibility (EMC) Part 6-2: Generic standards — Immunity for industrial environments	

The apparatus to which this certificate relates was tested against the above specifications. Full results are retained on file at the EMC Test Centre, Donibristle. The apparatus was found to be compliant to the above specifications subject to the following conditions:



UKAS Accreditation

Tests marked "Not UKAS Accredited" in this certificate are not included in the UKAS Accreditation Schedule for our laboratory.
Opinions and interpretations expressed herein are outside the scope of UKAS Accreditation.

EUT Submitted

These results apply only to the particular EUT submitted, in the configuration used and in the mode of operation tested.

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Tested by: -  W. Duff Test Technician	Approved signatory: -  G. Whyte Laboratory Manager / Senior Engineer, TMIET
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EMC FORM 044 Issue 12



1574
Testing

**A BIS
designated
Notified Body
No 1892**
Consultancy



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Abnormalities/Departures from Standard Conditions

None

Tests Referenced**EN61000-6-3: 2007 Electromagnetic Compatibility (EMC) Part 6-3: Generic standards — Emission standard for residential, commercial and light-industrial environments**

EN61000-6-3: 2007 refers to the following specifications: -

	Required?	Level	Result
EN 55016-2-3: 2006 Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-3: Methods of measurement of disturbances and immunity – Radiated disturbance measurement	No	Conducted emissions Class B, Power lines Not applicable – No mains power	N/A
	No	Conducted emissions Class B, Telecom lines Not applicable – No Telecom lines	N/A
	Yes	Radiated emissions Class B 30MHz to 1000MHz	Pass
EN61000-3-2: 2006 Part 3-2: Limits – Limits for harmonic current emissions (equipment input current up to and including 16A per phase.	No	Class A Not applicable – No mains power	N/A
EN61000-3-3: 1995+A1 Part 3-3: Limits – Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16A per phase and not subject to conditional connection.	No	Pst/Dmax Not applicable – No mains power	N/A

EN 61000-6-2:2005 Electromagnetic Compatibility (EMC) Part 6-2: Generic standards — Immunity for industrial environments

EN61000-6-2: 2005 refers to the following specifications; Electromagnetic Compatibility (EMC)

Note: **EN61000-6-2: 2005** references dated and undated basic standards. Standards with amendments have been used during testing, for reasons of equipment and/or facilities calibration, as indicated below

	Required?	Level	Result
EN61000-4-2: 1995 (incl A1, A2) Part 4-2. Testing and measurement techniques - Electrostatic discharge immunity test	Yes	8kV air discharge 4kV contact discharge	Pass
EN61000-4-3: 2002 (incl A1) Part 4-3. Testing and measurement techniques – Radiated, radio frequency, electromagnetic field immunity test	Yes	10V/m, 80MHz to 1000MHz, 1kHz 80% AM 3V/m, 1400MHz to 2000MHz, 1kHz 80% AM 1V/m, 2000MHz to 2700MHz, 1kHz 80% AM	Pass
EN61000-4-4: 2004 Part 4-4. Testing and measurement techniques – Electrical fast transient/burst immunity test	No	2kV power lines Not applicable – No mains power	N/A
	No	1kV signal and other Not applicable – No external cabling	N/A
EN61000-4-5: 1995 (incl A1) Part 5. Testing and measurement techniques. Section 5. Surge immunity test.	No	2kV line to earth, 1kV line to neutral Not applicable – No mains power	N/A
	No	1kV signal Not applicable – No external cabling	N/A
EN61000-4-6: 1996 (incl A1) Part 4-6. Testing and measurement techniques - Immunity to conducted disturbances induced by radio frequency fields.	No	10Vrms Power lines Not applicable – No mains power	N/A
	No	10Vrms Signal lines Not applicable – No external cabling	N/A
EN61000-4-8: 1993 (incl A1) Part 8. Testing and measurement techniques. Section 8. Power frequency magnetic field immunity test.	No	30A/m, 50/60Hz Not applicable – No magnetically sensitive components	N/A
EN61000-4-11: 2004 Part 11. Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests	No	Not applicable – No mains power	N/A

Opinions/Interpretations/Additional information

For Radiated Emission compliance at 152MHz and 174.3MHz the following modification was required

A Fair Rite 0444-164-181 ferrite was fitted to the umbilical signal cable

-----End of Certificate-----

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