

**LITHIUM CELLS OR BATTERIES TEST SUMMARY**  
**IN ACCORDANCE WITH SUB-SECTION 38.3**  
**OF MANUAL OF TEST AND CRITERIA**

**BATTERY TRANSPORTATION INFORMATION**

<i>Name of battery :</i> Item Number : 110-0019665 Item Name : Battery K330-6k Complete Item Description : 600 bar pressure rated battery module		<i>Battery manufacturer's contact information :</i> Kongsberg Discovery Strandpromenaden 50 3183 Horten Norway +47 992 03 830 <a href="http://kongsberg.com/discovery">kongsberg.com/discovery</a>	
<i>Name of the test laboratory :</i> Norwegian Defence Research Establishment (FFI) Instituttveien 20 NO-2007 Kjeller Norway (+47) 6380 70000 <a href="mailto:post@ffi.no">post@ffi.no</a>		<i>Test report id. number:</i> 23/01268	<i>Date of the test report:</i> 2023-10-17
<i>Description of battery:</i> This battery, based on the 498659 battery block submodule, is a battery module compatible with the HUGIN AUV systems. A single HUGIN AUV system can use 2 to 15 of these modules.  Battery type : Lithium Ion Battery energy : 11923.2 Wh Battery dimensions : 1468 x 248 x 145mm Battery weight : 99.0 kg		<i>List of tests conducted and results (i.e. pass/fail) :</i> Test T.1 : Altitude Simulation : Pass Test T.2 : Thermal test : Pass Test T.3 : Vibration : Pass Test T.4 : Shock : Pass Test T.5 : External short circuit : Pass Test T.6 : Impact/Crush : Not applicable Test T.7 : Overcharge : Not applicable * Test T.8 : Forced discharge : Not applicable  Additional testing comments : *This battery block is not a standalone battery, and includes no overcharge protection. This is taken care of by a separate BMS inside a complete battery module.  The test above is applicable for the 498659 battery block submodules inside this battery module. This complete battery module is covered by UN 38.3.3 (g).	
<i>Reference to assembled battery testing requirements, (i.e. 38.3.3 (f) and 38.3.3 (g)) :</i>  Covered by 38.3.3 (g)	<i>Reference to revised edition of the Manual of Tests and Criteria :</i>  Revision 7	<i>Does the battery comply with the 30% state of charge (SOC) :</i>  Yes	
<b>PRODUCT CLASSIFICATION FOR TRANSPORT (According to UN - DGP)</b>			
<i>UN Classification :</i> <b>UN 3480</b>		<i>Shipping name :</i> <b>Lithium Ion batteries</b>	
<i>Signature (name and title) :</i> Axel Relefors Battery responsible		This document remains valid as long as no changes, modifications, or additions are made to the battery described in this document, after being transported from Kongsberg Discovery's facilities. This battery has been classified according to the applicable transport regulations and the UN Manual of Tests and Criteria as of the date of certification. The battery must be packed, labeled and documented according to country and other international regulations for transportation.	
<i>Date :</i> 2023-11-09			