

**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 : 421945 Item Name : Battery Module 48V MUNIN+ Item Description : Battery module for use in MUNIN+ and Marine Robotics systems		<i>Battery manufacturer's contact information :</i> Kongsberg Maritime Strandpromenaden 50 3183 Horten Norway +47 815 73 700 kongsberg.com	
<i>Name of the test laboratory :</i> Norwegian Defence Research Establishment (FFI) Instituttveien 20 NO-2007 Kjeller Norway (+47) 63807000 ffi@ffi.no		<i>Test report id. number:</i> 17/01706	<i>Date of the test report:</i> 14.08.2017
<i>Description of battery:</i> This is a battery module used in the MUNIN+ AUV and other Marine Robotics systems. Systems using this battery module may have from 1 to 18 of these modules. Battery type : Lithium Ion Battery energy : 2028.6 Wh Battery dimensions : 361 x 326 x 81mm Battery weight : 12.5 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 : Pass Test T.8 : Forced discharge : Not applicable Additional testing comments :	
<i>Reference to assembled battery testing requirements, (i.e. 38.3.3 (f) and 38.3.3 (g)) :</i> Not applicable	<i>Reference to revised edition of the Manual of Tests and Criteria :</i> Revision 6	<i>Does the battery comply with the 30% state of charge (SOC) :</i> Yes	
PRODUCT CLASSIFICATION FOR TRANSPORT (According to UN - DGP)			
<i>UN Classification :</i> UN 3480		<i>Shipping name :</i> Lithium Ion batteries	
<i>Signature (name and title) :</i> Kevin Eriksen 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 Maritime'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> 13.01.2020			