

	BATTERY SPECIFICATION	No. 800050
Watford WD18 9SB UK +44 (0)1923 241500 sales@enix-energies.com	Originated by: Date: 19 th January 2005	Page 1 of 3. Latest Issue No: 3 rd Latest Issue Date: 24/04/06

Nominal Ratings: 15V 6.8Ah

Composition: 4s1pMP176065 Lithium-ion with 5A protection.

NB: Actual voltage and capacity in use will be affected by various factors, including temperature, discharge rate, charge rate and method (if applicable), end point voltage, history (e.g. past use, storage) etc.

Picture of Battery Pack:



Mechanical Details:	NB: All dimensions are approximate and nominal. Sleeved packs are not weather proof and are designed to be installed in a protective case or within equipment. They are not intended to be handled by the end user of the equipment and will normally require hard cases before they can be repeatedly inserted and removed. All dimensions are in mm.		
Length:	122 mm	Weight:	640g
Depth:	75 mm	Covering:	PVC Heat Shrink
Height:	38 mm	Labelling:	Standard
Leads:	≈150mm 19/0.2	Connectors:	None

© Copyright Enix Energies 2005. NB: This document and the product design are the intellectual property of Enix Energies. No document or design may be copied or used for commercial purposes without written permission of Enix Energies. **Users must satisfy themselves, by means of testing etc, that products are suitable for their application.** Data in this document is for general guidance only; consult cell manufacturers data for definitive information. Information is given free of charge and in good faith, but no responsibility can be accepted for any errors or omissions or costs or losses or liabilities arising from the use of this information.

All business is conducted to Enix Energies terms and conditions only.

	BATTERY SPECIFICATION	No. 800050
Watford WD18 9SB UK +44 (0)1923 241500 sales@enix-energies.com	Originated by: Date: 19 th January 2005	Page 2 of 3. Latest Issue No: 3 rd Latest Issue Date: 24/04/06

Protection Devices:	NB: These devices are designed to protect the pack in the event of control circuit failures e.g. charger failure. They must not be used as a main means of charge/discharge control. Protection circuits have response times in the order of a few milliseconds.		
Electronic Circuit	5A on each cell	Polyswitch	
Fuse	7A	Bypass Diode:	5A on each cell
Thermal Fuse	84 °C on each cell	Other:	

Electrical Details:	UNIT	NOMINAL	MINIMUM	MAXIMUM
Charge Current	mA	3,100mA	150mA	5,000mA
Charge Voltage	V	16.80V	16.24V	16.56V
Charging Temperature	°C	+20	0	+40
End of charge detection:				
By timer ¹	Hours	3 h if charged with I max = 3.1A		
By low current	mA	150mA		
Discharge Current ²	mA			5,000mA
Cut-off Voltage ³	V	11.2V	10.8V	12.0V
Discharge Temperature*	°C	+20	-10	+40

Notes:

¹ The timer should start at the start of the constant voltage phase of charging. Time to reach approx. 85% charged will be the nominal capacity (6.8Ah) divided by the I_{max} current. Time to fully charge will be 150% of this time.

² Batteries fitted with electronic protection circuits cannot normally deliver current pulses above the maximum figure, since the circuit has short response times.

³ This is the voltage at which the pack is considered discharged. If your equipment continues to discharge the battery below the minimum figure indicated, the battery may be damaged and/or its life reduced. If your equipment ceases to function at a voltage above the maximum figure, you may not recover the full battery capacity.

* The battery may need to be derated at high and low temperatures. In particular, low temperatures will increase internal resistance and reduce the capacity which can be recovered, particularly at high currents. High temperatures will increase self discharge and reduce battery life. See our website for more information.

Storage:	UNIT	NOMINAL	MINIMUM	MAXIMUM*
Temperature	°C	+20	-20	+30
Duration	Months			12 months

Store at 50% state of charge for optimum life. **Do NOT store in a discharged condition.**

* Occasional short excursions to +60 possible. Prolonged storage at high temperatures will dramatically shorten life

OUTLINE SAFETY WARNING: USE ONLY WITHIN THE ALLOWED PARAMETERS.

Do not short circuit or over-load the battery. Charge only using an approved charger designed specifically to charge this battery. Do not heat above maximum temperatures indicated. Never crush, mutilate, puncture or abuse the battery. Do not dismantle the pack or disable any of the protective devices or circuits.
DO NOT USE THE BATTERY IF YOU SUSPECT IT MAY BE FAULTY OR DAMAGED.

Related documents: You should also consult the following documents:

1) MP176065 Cell Data Sheet. 2) MP176065 Cell Material Safety Data Sheet. Go to www.enix.com

© Copyright Enix Energies 2005. NB: This document and the product design are the intellectual property of Enix Energies. No document or design may be copied or used for commercial purposes without written permission of Enix Energies. **Users must satisfy themselves, by means of testing etc, that products are suitable for their application.** Data in this document is for general guidance only; consult cell manufacturers data for definitive information. Information is given free of charge and in good faith, but no responsibility can be accepted for any errors or omissions or costs or losses or liabilities arising from the use of this information.

All business is conducted to Enix Energies terms and conditions only.

	BATTERY SPECIFICATION	No. 800050
Watford WD18 9SB UK +44 (0)1923 241500 sales@enix-energies.com	Originated by: Date: 19 th January 2005	Page 3 of 3. Latest Issue No: 3 rd Latest Issue Date: 24/04/06

UN T1-T8 Tested



The type 800050 battery has passed the UN T1-T8 tests but must be shipped as Class 9 UN3090 Hazardous goods, due to the lithium equivalence 1.86g per cell.

New transport regulations affecting lithium, lithium-ion and/or lithium polymer batteries came into force during 2003 and 2004.

These regulations require that all lithium, lithium-ion and lithium polymer cells and batteries must pass a number of UN tests before they may be transported by road, rail, sea or air. In addition lithium, lithium-ion and lithium polymer cells and batteries containing more than certain limits of lithium or “lithium equivalence” must be shipped as Class 9 hazardous goods. For cells and batteries the classification is UN3090. Batteries below these limits may be transported as non-hazardous. There are certain exceptions.

Disclaimer: We do not claim to be experts in with regard to transport regulations, shipping, packing etc. Users and prospective users of lithium, lithium-ion and/or lithium polymer cells and/or battery packs should consult a qualified person for definitive information, e.g. a Dangerous Goods Safety Advisor. Enix Energies, its owners, directors, employees and servants cannot accept any responsibility for the accuracy of the above information.

© Copyright Enix Energies 2005. NB: This document and the product design are the intellectual property of Enix Energies. No document or design may be copied or used for commercial purposes without written permission of Enix Energies. **Users must satisfy themselves, by means of testing etc, that products are suitable for their application.** Data in this document is for general guidance only; consult cell manufacturers data for definitive information. Information is given free of charge and in good faith, but no responsibility can be accepted for any errors or omissions or costs or losses or liabilities arising from the use of this information.

All business is conducted to Enix Energies terms and conditions only.