






# UN38.3 Report

Produkte  
Products







<b>Prüfbericht-Nr.:</b> <i>Test Report No.:</i>	50249040 001	<b>Auftrags-Nr.:</b> <i>Order No.:</i>	114085558	Seite 1 von 17 <i>Page 1 of 17</i>
<b>Kunden-Referenz-Nr.:</b> <i>Client Reference No.:</i>	N/A	<b>Auftragsdatum:</b> <i>Order date:</i>	2018-11-12	
<b>Auftraggeber:</b> <i>Client:</i>	MPS Energy Inc. 7F-5, 369, Fuxing N. Rd., Taipei 105 Taiwan			
<b>Prüfgegenstand:</b> <i>Test item:</i>	Rechargeable Lithium-ion Battery Pack			
<b>Bezeichnung / Typ-Nr.:</b> <i>Identification / Type No.:</i>	MBP-BR36S6M02.L10, MBP-BR36S6M02.L6, MBP-BR36S6M03.L10, MBP-BR36S6M03.L6, MBP-BR36S5M02.L10, MBP-BR36S5M02.L6, MBP-BR36S5M03.L10, MBP-BR36S5M03.L6			
<b>Auftrags-Inhalt:</b> <i>Order content:</i>	Service of test report			
<b>Prüfgrundlage:</b> <i>Test specification:</i>	United Nations Recommendations on the Transport of Dangerous Goods – Manual of Tests and Criteria, Sixth revised edition + Amendment 1, – Part III, Section 38.3			
<b>Wareneingangdatum:</b> <i>Date of receipt:</i>	2019-07-01	See appendix to this report for photo documentation		
<b>Prüfmuster-Nr.:</b> <i>Test sample No.:</i>	A000893557-001 to 016 A000901001-001 to 016			
<b>Prüfzeitraum:</b> <i>Testing period:</i>	2019-07-01 - 2019-08-29			
<b>Ort der Prüfung:</b> <i>Place of testing:</i>	See following pages			
<b>Prüflaboratorium:</b> <i>Testing laboratory:</i>	Taichung Testing Laboratories			
<b>Prüfergebnis*:</b> <i>Test result*:</i>	Pass			
<b>geprüft von / tested by:</b>		<b>kontrolliert von / reviewed by:</b>		
 <small>Project Engineer Signed by David H. H. Chu</small>		 <small>Testeur Signed by Paul L.M. Lin</small>		
<b>Datum</b> <i>Date</i>	<b>Name / Stellung</b> <i>Name / Position</i>	<b>Unterschrift</b> <i>Signature</i>	<b>Datum</b> <i>Date</i>	<b>Name / Stellung</b> <i>Name / Position</i>
				<b>Unterschrift</b> <i>Signature</i>
<b>Sonstiges / Other:</b>				
<b>Zustand des Prüfgegenstandes bei Anlieferung:</b> <i>Condition of the test item at delivery:</i>		Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>		
* Legende: 1 = sehr gut    2 = gut    3 = befriedigend    4 = ausreichend    5 = mangelhaft P(ass) = entspricht o.g. Prüfgrundlage(n)    F(ail) = entspricht nicht o.g. Prüfgrundlage(n)    N/A = nicht anwendbar    N/T = nicht getestet Legend: 1 = very good    2 = good    3 = satisfactory    4 = sufficient    5 = poor P(ass) = passed a.m. test specification(s)    F(ail) = failed a.m. test specification(s)    N/A = not applicable    N/T = not tested				
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>				

# IEC62133:2-2017 CERTI

		Ref. Certif. No.
		JPTUV-100377
<b>IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME</b>		
<b>CB TEST CERTIFICATE</b>		
Product	Rechargeable Lithium-ion Battery Pack	
Name and address of the applicant	MPS Energy Inc. 7F-5, 369, Fuxing N. Rd., Taipei 105 Taiwan	
Name and address of the manufacturer	MPS Energy Inc. 7F-5, 369, Fuxing N. Rd., Taipei 105 Taiwan	
Name and address of the factory	Highcell Tech Co., Ltd. 3F., No 196-12, Sec. 3, Datong Rd., Sijhih Dist., New Taipei City, 22103 Taiwan	
Ratings and principal characteristics	For rating details, refer to the test report.	
Trademark (if any)		
Customer's Testing Facility (CTF) Stage used	N/A	
Model / Type Ref.	MBP-BR36S6M02.L10, MBP-BR36S6M02.L6, MBP-BR36S6M03.L10 MBP-BR36S6M03.L6, MBP-BR36S5M02.L10, MBP-BR36S5M02.L6 MBP-BR36S5M03.L10, MBP-BR36S5M03.L6, MBP-BR36S6M02.L4 MBP-BR36S6M03.L4, MBP-BR36S5M02.L4, MBP-BR36S5M03.L4 For model differences, refer to the test report.	
Additional information (if necessary may also be reported on page 2)		
A sample of the product was tested and found to be in conformity with	IEC 62133-2:2017 See Test Report for National Differences	
As shown in the Test Report Ref. No. which forms part of this Certificate	50266162 001	
This CB Test Certificate is issued by the National Certification Body		
 <b>TÜVRheinland®</b>	TÜV Rheinland Japan Ltd. Global Technology Assessment Center 4-25-2 Kita-Yamata, Tsuzuki-ku Yokohama 224-0021 Japan Phone + 81 45 914-3888 Fax + 81 45 914-3354 Mail: info@jpn.tuv.com Web: www.tuv.com	
Date: 12.09.2019	Signature:	 Jason C. H. Chang

# EMC Test Report

Produkte Products			
Prüfbericht-Nr.: Test Report No.:	50215000 001	Auftrags-Nr.: Order No.:	114085558
		Seite 1 von 24 Page 1 of 24	
Kunden-Referenz-Nr.: Client Reference No.:	364149	Auftragsdatum: Order date.:	11 Dec. 2018
Auftraggeber: Client:	MPS Energy Inc. 6F, 88, Sec. 1, Xintai 5th Rd., Xizhi, New Taipei City 221, Taiwan, R.O.C.		
Prüfgegenstand: Test item:	MPS Battery Pack		
Bezeichnung / Typ-Nr.: Identification / Type No.:	MBP-BR36S6M02.L10, MBP-BR36S6M02.L6, MBP-BR36S6M02.L4, MBP-BR36S6M03.L10, MBP-BR36S6M03.L6, MBP-BR36S6M03.L4 (With Bluetooth) MBP-BR36S5M02.L10, MBP-BR36S5M02.L6, MBP-BR36S5M02.L4, MBP-BR36S5M03.L10, MBP-BR36S5M03.L6, MBP-BR36S5M03.L4 (Without Bluetooth)		
Auftrags-Inhalt: Order content:	TUV Rheinland - EMC service		
Prüfgrundlage: Test specification:	EN 55014-1: 2017 EN 55014-2: 2015		
Wareneingangsdatum: Date of receipt:	10 Apr. 2019		
Prüfmuster-Nr.: Test sample No.:	A000893557-001 A000893557-002		
Prüfzeitraum: Testing period:	Refer to test report		
Ort der Prüfung: Place of testing:	TÜV Rheinland Taiwan Ltd.		
Prüflaboratorium: Testing laboratory:	TÜV Rheinland Taiwan Ltd. Taichung Branch Office		
Prüfergebnis*: Test result*:	Pass		
geprüft von / tested by:			
			
24 Apr. 2019	Neil J. N. Tsai / Senior Project Manager	24 Apr. 2019	Spring C. Y. Wang / Department Manager
Datum Date	Name/Stellung Name/Position	Unterschrift Signature	Datum Date
Name/Stellung Name/Position		Unterschrift Signature	
Sonstiges / Other:			
Note 1: Normative reference from EN 15194: 2017 Note 2: EN 55014-2: Category III			
Zustand des Prüfgegenstandes bei Anlieferung: Condition of the test item at delivery:		Prüfmuster vollständig und unbeschädigt Test item complete and undamaged	
* Legende: 1 = sehr gut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet			
Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor P(ass) = passed a.m. test specifications(s) F(ail) = failed a.m. test specifications(s) N/A = not applicable N/T = not tested			
<b>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</b> <i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>			
V04 TÜV Rheinland Taiwan Ltd. 11F., No. 758, Sec. 4, Bade Rd., Taipei 105, Taiwan, R.O.C.			



# FCC 15B Test Report

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Products





<b>Prüfbericht-Nr.:</b> <i>Test Report No.:</i>	50291067 001	<b>Auftrags-Nr.:</b> <i>Order No.:</i>	238109681	Seite 1 von 39 <i>Page 1 of 39</i>
<b>Kunden-Referenz-Nr.:</b> <i>Client Reference No.:</i>	364149	<b>Auftragsdatum:</b> <i>Order date.:</i>	03 Sep. 2019	
<b>Auftraggeber:</b> <i>Client:</i>	MPS Energy Inc. 7F-5, 369, Fuxing N. Rd., Taipei 105, Taiwan, R.O.C.			
<b>Prüfgegenstand:</b> <i>Test item:</i>	Rechargeable Lithium-ion Battery Pack			
<b>Bezeichnung / Typ-Nr.:</b> <i>Identification / Type No.:</i>	MBP-BR36S6M02.L10, MBP-BR36S6M02.L6, MBP-BR36S6M02.L4, MBP-BR36S6M03.L10, MBP-BR36S6M03.L6, MBP-BR36S6M03.L4 (With Bluetooth) MBP-BR36S5M02.L10, MBP-BR36S5M02.L6, MBP-BR36S5M02.L4, MBP-BR36S5M03.L10, MBP-BR36S5M03.L6, MBP-BR36S5M03.L4 (Without Bluetooth)			
<b>Auftrags-Inhalt:</b> <i>Order content:</i>	TUV Rheinland - EMC service			
<b>Prüfgrundlage:</b> <i>Test specification:</i>	FCC 47 CFR Part 15, Subpart B: 2018 ICES-003: Issue 6 (2016)			
<b>Wareneingangsdatum:</b> <i>Date of receipt:</i>	06 Sep. 2019			
<b>Prüfmuster-Nr.:</b> <i>Test sample No.:</i>	A000986772-001 A000986772-002			
<b>Prüfzeitraum:</b> <i>Testing period:</i>	Refer to test report			
<b>Ort der Prüfung:</b> <i>Place of testing:</i>	Taichung Testing Laboratories			
<b>Prüflaboratorium:</b> <i>Testing laboratory:</i>	TÜV Rheinland Taiwan Ltd.			
<b>Prüfresultat*:</b> <i>Test result*:</i>	Pass			
<b>geprüft von / tested by:</b>			<b>kontrolliert von / reviewed by:</b>	
23 Sep. 2019	Neil J. N. Tsai/ Senior Project Manager	23 Sep. 2019	Spring C. Y. Wang/ Department Manager	
<b>Datum</b> <i>Date</i>	<b>Name/Stellung</b> <i>Name/Position</i>	<b>Unterschrift</b> <i>Signature</i>	<b>Datum</b> <i>Date</i>	<b>Name/Stellung</b> <i>Name/Position</i>
<b>Sonstiges / Other:</b>				
<b>Zustand des Prüfgegenstandes bei Anlieferung:</b> <i>Condition of the test item at delivery:</i>		Prüfmuster vollständig und unbeschädigt Test item complete and undamaged		
<p>* Legende: 1 – sehr gut 2 – gut 3 – befriedigend 4 – ausreichend 5 – mangelhaft P(ass) – entspricht o.g. Prüfgrundlage(n) F(ail) – entspricht nicht o.g. Prüfgrundlage(n) NA – nicht anwendbar N/T – nicht getestet</p> <p>Legend: 1 – very good 2 – good 3 – satisfactory 4 – sufficient 5 – poor P(ass) – passed a.m. test specifications(s) F(ail) – failed a.m. test specifications(s) NA – not applicable N/T – not tested</p>				
<p><b>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</b> <i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i></p>				

v04

# PSE Test Report

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<b>Prüfbericht-Nr.:</b> <i>Test report no.:</i>	50348712 001	<b>Auftrags-Nr.:</b> <i>Order no.:</i>	238112699 190	Seite 1 von 17 Page 1 of 17
<b>Kunden-Referenz-Nr.:</b> <i>Client reference no.:</i>	N/A	<b>Auftragsdatum:</b> <i>Order date:</i>	22.10.2019	
<b>Auftraggeber:</b> <i>Client:</i>	MPS Energy Inc. 7F-5, 369, Fuxing N. Rd., Taipei 105 Taiwan			
<b>Prüfgegenstand:</b> <i>Test item:</i>	Rechargeable Li-Ion Battery Pack			
<b>Bezeichnung / Typ-Nr.:</b> <i>Identification / Type no.:</i>	MBP-BS48S7M01.L10, MBP-BS48S8M01.L10			
<b>Auftrags-Inhalt:</b> <i>Order content:</i>	Test report			
<b>Prüfgrundlage:</b> <i>Test specification:</i>	Interpretation for METI Ordinance of Technical Requirements (H25.07.01); Appendix 9: Lithium ion secondary batteries			
<b>Wareneingangsdatum:</b> <i>Date of sample receipt:</i>	14.02.2020	See appendix to this report_for photo documentation		
<b>Prüfmuster-Nr.:</b> <i>Test sample no.:</i>	A001064207-001 - A001064207-020			
<b>Prüfzeitraum:</b> <i>Testing period:</i>	17.02.2020 - 27.03.2020			
<b>Ort der Prüfung:</b> <i>Place of testing:</i>	See Testing Location of test report			
<b>Prüflaboratorium:</b> <i>Testing laboratory:</i>	Taipei Testing laboratories.			
<b>Prüfergebnis*:</b> <i>Test result*:</i>	Pass			
<b>geprüft von:</b> <i>tested by:</i>	 4/15/2020	<b>kontrolliert von:</b> <i>reviewed by:</i>	 4/15/2020	
<b>Datum:</b> <i>Date:</i>	Project Engineer Signed by: Dennis H. P. Chiu	<b>Datum:</b> <i>Date:</i>	Reviewer Signed by: Bruce C.C. Tsai	
<b>Stellung / Position:</b>		<b>Stellung / Position:</b>		
<b>Sonstiges / Other:</b>	This product is classified as "Other Electrical Appliances and Materials (Category B Product, (PS)E Mark )" – Lithium ion batteries – "Lithium ion batteries" under the Electrical Appliance Material Safety Law (DENAN Law)			
<b>Zustand des Prüfgegenstandes bei Anlieferung:</b> <i>Condition of the test item at delivery:</i>	Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>			
<b>* Legende:</b>	1 = sehr gut P(ass) = entspricht o.g. Prüfgrundlage(n)	2 = gut 3 = befriedigend F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	4 = ausreichend N/A = nicht anwendbar	5 = mangelhaft N/T = nicht getestet
<b>* Legend:</b>	1 = very good P(ass) = passed a.m. test specification(s)	2 = good 3 = satisfactory F(ail) = failed a.m. test specification(s)	4 = sufficient N/A = not applicable	5 = poor N/T = not tested
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# EN ISO 13849-1 Report



## SUMMARY REPORT

Summary Report No.	YF1S003/2019	Date of Issued	January 31, 2019
Product Description	Battery Management System	Number of Page	1
Model Number	MBS-BS6	Series Model(s)	MBS-BS5, MBS-BS7, MBS-BS8
Applicant	MPS Energy Inc.	Manufacturer	MPS Energy Inc.
Address of Applicant	6F, 88, SEC. 1, XINTAI 5TH RD., XIZHI, NEW TAIPEI CITY 221, TAIWAN, R.O.C.	Address of Manufacturer	6F, 88, SEC. 1, XINTAI 5TH RD., XIZHI, NEW TAIPEI CITY 221, TAIWAN, R.O.C.
Evaluation Report Cited	YF10003/2019	Applicable Standard	EN ISO 13849-1:2015

### Conclusion

Based on our issued Evaluation Report(s) for manufacturer's product according to EN ISO 13849-1:2015, the conclusion is summarized as below.

According to clause 4.3.22 – Table 34 of EN 15194:2017, the following required performance level should be achieved.

Safety function	PL <sub>r</sub>	Safety function ID
Prevention of an unintentional self-start of the EPAC	PL <sub>r</sub> c	Not applicable
Prevention of electric motor assistance functions without pedalling, and without activation of the start-up assistance mode	PL <sub>r</sub> c	Not applicable
Prevention of risk of fire in case of management system failure for batteries with capacity above 100 Wh	PL <sub>r</sub> c	SF01, SF02, SF03, SF04, SF05, SF06

The ability of the manufacturer's product to perform safety functions is expressed through the determination of the performance level shown below.

Safety Function ID	PL <sub>r</sub>	Category	MTTF <sub>D</sub> (year)	DC <sub>avg</sub>	CCF (point)	PFH <sub>D</sub> (1/h)	Performance Level	Verdict PL ≥ PL <sub>r</sub>
SF01	PL <sub>r</sub> c	Cat. 2	66.2	89.9%	95	4.1E-7	PL c	Yes
SF02	PL <sub>r</sub> c	Cat. 2	53.6	89.9%	95	6E-7	PL c	Yes
SF03	PL <sub>r</sub> c	Cat. 2	53.6	89.9%	95	5.4E-7	PL c	Yes
SF04	PL <sub>r</sub> c	Cat. 2	46.9	89.9%	75	6.5E-7	PL c	Yes
SF05	PL <sub>r</sub> c	Cat. 2	46.9	89.9%	75	6.5E-7	PL c	Yes
SF06	PL <sub>r</sub> c	Cat. 2	53.6	89.9%	75	5.4E-7	PL c	Yes

These safety functions also meet the following requirements according to EN ISO 13849-1:2015.

- safety-related software complied with clause 4.6 and Annex J.
- systematic failure complied with Annex G.

Per our opinions, the evaluation results indicate that the designed safety functions of the client's product achieve PL c ≥ PL<sub>r</sub> c.

Signed for and on behalf of  
SGS TAIWAN Ltd.

Terence Jer-Hong Hsieh  
Department Manager

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SGS Taiwan Ltd.  
台灣檢驗科技股份有限公司

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No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北大業園區五工路134號  
t (886-2) 2299-3279 f (886-2) 2299-9558 www.tw.sgs.com  
Member of SGS Group

# ISO 13849-1/-2 Report



Report No.	4790223980-S1
Date	2022-10-21

## SUMMARY REPORT

MPS Energy Inc  
7F-5 369 Fuxing N Rd Taipei, 105 Taiwan  
Project: 4790223980

This is a summary of our investigation of functional safety, according to the request quoted in the subjected project.

The investigation details and results are detailed in the following sections:

### 1. Investigated Product:

Product	Battery Management System
Model	MBS-BS5 VF.2
Version	32.0301.20

The detailed information of the product is contained in the UL investigation, File MH65439. Issued on 2022-06-30.

### 2. Applicable Standard(s)

Standard	Edition/Revision Date
ISO 13849-1: Safety of Machinery – Safety-Related Parts of Control Systems – Part 1: General Principles for Design	Third Edition, dated 2015-12-15
ISO 13849-2: Safety of machinery — Safety-related parts of control systems – Part 2: Validation	Second Edition, dated 2012-10-15

- The applicable standard, evaluation process, and test methods that were used for the evaluation are based on the request of the applicant.
- The test results presented in this letter relate only to the provided samples.
- The contents of this test report cannot be used for the purposes, such as advertising for consumers.
- This letter shall not be reproduced except in full without the written approval of UL.



# UL2271 CERTI

## CERTIFICATE OF COMPLIANCE

**Certificate Number** MH65439  
**Report Reference** MH65439-20220630  
**Date** 2022-July-22

**Issued to:** MPS Energy Inc  
7f-5  
369 Fuxing N Rd  
Taipei 105 TW

**This is to certify that  
representative samples of**

BATTERIES FOR USE IN LIGHT ELECTRIC VEHICLES

Batteries for Use in Light Electric Vehicle (LEV)  
Applications,  
Models MBP-BI36S5R02.L10.

Have been evaluated by UL in accordance with the  
Standard(s) indicated on this Certificate.

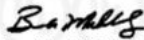
**Standard(s) for Safety:** ANSI/CAN/UL/ULC 2271 - Standard For Safety For  
Batteries for Use In Light Electric Vehicle (LEV)  
Applications

**Additional Information:** See the UL Online Certifications Directory at  
<https://iq.ulprospector.com> for additional information

This Certificate of Compliance indicates that representative samples of the product described in the certification report have met the requirements for UL certification. It does not provide authorization to apply the UL Mark. Only the Authorization Page that references the Follow-Up Services Procedure for ongoing surveillance provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program

UL LLC

Any Information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/about/locations>.





# TAIWAN BSMI CERTI





經濟部標準檢驗局  
BUREAU OF STANDARDS, METROLOGY AND INSPECTION,  
MINISTRY OF ECONOMIC AFFAIRS



## 商品驗證登錄電子證書 CERTIFICATE OF THE REGISTRATION OF PRODUCT CERTIFICATION

證書號碼：C13C8068710019 號 00  
Certificate No.

茲據 聯永基股份有限公司 申請驗證登錄，經審查結果符合規定，准予登錄並使用商品安全標章  及識別號碼：R3C871。其登錄事項如下：  
The application made by 聯永基股份有限公司 for Registration of Product R3C871 . Details of the registration are follows:

Certification has been reviewed and found to be in compliance with related regulations. Therefore, registration is granted with the Product Safety Mark  and the Identification No. R3C871 . Details of the registration are follows:

申請人：聯永基股份有限公司  
Applicant

統一編號：42626977  
Uniform No.

地址：臺北市松山區復興北路369號7樓之5  
Address

生產廠場：佐茂股份有限公司  
Factory

廠址：高雄市前鎮區擴建路1-16號5樓  
Factory Address

商品種類名稱：  
Type/name of product

商品分類號列：8507.60.00.90.0-D  
C. C. C Code

中文名稱：電動輔助自行車用二次鋰電池組  
Chinese name

英文名稱：  
English name

型式：MBP-BD36S2H01.L4  
Type

系列型式：MBP-BD36S1H01.L4(以下空白)  
Series of the type

依據標準：CNS15424-1 (104年版)、CNS15387 (104年版)  
Standards

標準檢驗局發證（發證地址：100臺北市中正區濟南路1段4號）

This certificate is issued by the BSMI. (No.4, Sec. 1, Jinan Rd., Zhongzheng Dist., Taipei City 100, Taiwan)

本證書以電子文件行之，所載內容若有不符之處，以標準局電腦資料為主，查詢驗證資料

網址：<http://bsmi.gov.tw>

登錄日期：中華民國	108	年	03	月	08	日
Registration Date	2019	(year)	03	(month)	08	(day)
本證書有效期至	111	年	03	月	07	日
Expiration Date	2022	(year)	03	(month)	07	(day)
發證日期：中華民國	108	年	03	月	08	日
Date of issue	2019	(year)	03	(month)	08	(day)





註1：持本證書進口驗證登錄商品時，進口人須與本證書名義人相同。

註2：次年度商品驗證登錄年費繳納期限為當年11月30日，逾期未繳納者，經限期繳納屆期未繳納，即依商品檢驗法第42條第7款規定廢止驗證登錄，並自次年度1月1日起生效。

# IP Test Report

Produkte  
Products



<b>Prüfbericht-Nr.:</b> <i>Test Report No.:</i>	<b>50251863 001</b>	<b>Auftrags-Nr.:</b> <i>Order No.:</i>	<b>114085558</b>	Seite 1 von 24 Page 1 of 24
<b>Kunden-Referenz-Nr.:</b> <i>Client Reference No.:</i>	N/A	<b>Auftragsdatum:</b> <i>Order date:</i>	Nov. 12, 2018	
<b>Auftraggeber:</b> <i>Client:</i>	<b>MPS Energy Inc.</b> 7F-5, 369, Fuxing N. Rd., Taipei 105 Taiwan			
<b>Prüfgegenstand:</b> <i>Test item:</i>	Rechargeable Lithium-ion Battery Pack			
<b>Bezeichnung / Typ-Nr.:</b> <i>Identification / Type No.:</i>	MBP-BR36S6M02.L10, MBP-BR36S6M02.L6, MBP-BR36S6M02.L4, MBP-BR36S6M03.L10, MBP-BR36S6M03.L6, MBP-BR36S6M03.L4, MBP-BR36S5M02.L10, MBP-BR36S5M02.L6, MBP-BR36S5M02.L4, MBP-BR36S5M03.L10, MBP-BR36S5M03.L6, MBP-BR36S5M03.L4			
<b>Auftrags-Inhalt:</b> <i>Order content:</i>	Service of test report			
<b>Prüfgrundlage:</b> <i>Test specification:</i>	IEC 60529: 1989-11 + A1:1999 + A2:2013 EN 60529:1991-10 (incl. Corrigendum: 1993-05 ) + A1: 2000-02 + A2:2013			
<b>Wareneingangsdatum:</b> <i>Date of receipt:</i>	2019-07-26	See appendix to this report for photo documentation		
<b>Prüfmuster-Nr.:</b> <i>Test sample No.:</i>	A000964793-009 to 010			
<b>Prüfzeitraum:</b> <i>Testing period:</i>	2019-07-29 - 2019-08-02			
<b>Ort der Prüfung:</b> <i>Place of testing:</i>	No. 9, Ln. 36, Sec. 3, Minsheng Road, Daya District, Taichung City 428, Taiwan			
<b>Prüflaboratorium:</b> <i>Testing laboratory:</i>	Taichung Testing Laboratories			
<b>Prüfergebnis*:</b> <i>Test result*:</i>	Pass			
<b>geprüft von / tested by:</b>		<b>kontrolliert von / reviewed by:</b>		
<div style="text-align: center;">               8/15/2019              Project Engineer              Signed by: Dennis H. P. Chiu         </div>		<div style="text-align: center;">               8/16/2019              Reviewer              Signed by: Paul L.M. Lin         </div>		
<b>Datum</b> <i>Date</i>	<b>Name / Stellung</b> <i>Name / Position</i>	<b>Unterschrift</b> <i>Signature</i>	<b>Datum</b> <i>Date</i>	<b>Name / Stellung</b> <i>Name / Position</i>
<b>Sonstiges/ Other Aspects:</b>				
Test report showing compliance to IP65.				
<b>Zustand des Prüfgegenstandes bei Anlieferung:</b> <i>Condition of the test item at delivery:</i>		Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>		
<p>* Legende: 1 = sehr gut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft                  P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar NT = nicht getestet                  Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor                  P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable NT = not tested</p> <p>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</p> <p><i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i></p>				

V04

# RoHS Test Report



**BUREAU  
VERITAS**

## TEST REPORT

**Report Number:** (6219)127-0156  
**報告號碼:**

May 17, 2019

**Date Received:** May 07, 2019  
**樣品收取日期:** 2019年05月07日

Page 1 of 29

MPS Energy Inc.  
6F., No.88, Sec. 1, Xintai 5th Rd., Xizhi Dist., New Taipei City 221, Taiwan (R.O.C.)  
聯永基股份有限公司  
221 新北市汐止區新台五路一段 88 號 6 樓

**Sample Description:** MPS BATTERY PACK (ROME)  
**樣品描述:**

**Item No(s):** MBP-BR36S5M02.L4 (BMS: BS5 / Cell A)  
**型號:** MBP-BR36S5M02.L6 (BMS: BS5 / Cell B)  
MBP-BR36S5M02.L10 (BMS: BS5 / Cell C)  
MBP-BR36S6M02.L4 (BMS: BS6 / Cell A)  
MBP-BR36S6M02.L6 (BMS: BS6 / Cell B)  
MBP-BR36S6M02.L10 (BMS: BS6 / Cell C)  
MBP-BR36S5M03.L4 (BMS: BS5 / Cell A)  
MBP-BR36S5M03.L6 (BMS: BS5 / Cell B)  
MBP-BR36S5M03.L10 (BMS: BS5 / Cell C)  
MBP-BR36S6M03.L4 (BMS: BS6 / Cell A)  
MBP-BR36S6M03.L6 (BMS: BS6 / Cell B)  
MBP-BR36S6M03.L10 (BMS: BS6 / Cell C)  
**Test Period:** May 07, 2019 to May 17, 2019  
**測試日期:** 2019年05月07日至2019年05月17日

### SUMMARY OF TEST RESULTS 測試結果摘要

TEST REQUESTED 測試要求	CONCLUSION 結論	REMARK 備註
European Parliament and Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) 有關歐盟委員會針對電子產品的指令(電子電氣禁用某些有害物質指令) - 2011/65/EU	PASS 通過	-
Phthalates Test - Directive (EU)2015/863 Amendment of European Parliament and Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) (Note: The amendment will be effective on 22 July 2019. For medical devices, monitoring and control instruments, effective date will be 22 July 2021.) 鄰苯二甲酸鹽測試- 指令2011/65/EU 歐洲議會和理事會關於電子電氣設備中限制使用某些有害物質 (RoHS)的修正案指令(EU)2015/863. (注釋:修正案將於2019年7月22日起生效。對於醫療設備及監測和控制設備生效日期為2021年7月22日)。	PASS 通過	-

C/N /TC/ML

Bureau Veritas  
Consumer Product Service (HK.) Ltd.  
Taiwan Branch  
37, Zhongyang 5 Rd., Sec. 2, Beitou,  
Taipei 112, Taiwan, R.O.C.

Tel : 886-2-2895-3666  
Fax: 886-2-2895-0999  
<http://www.cps.bureauveritas.com>

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# REACH TEST REPORT



**BUREAU  
VERITAS**

## TEST REPORT

Lab No. : (6219)127-0185  
Date : May 15, 2019  
Page : 1 of 6

**APPLICANT**  
申請人

MPS Energy Inc.  
6F., No.88, Sec. 1, Xintai 5th Rd., Xizhi Dist., New Taipei City 221,  
Taiwan (R.O.C.)  
聯永基股份有限公司  
221 新北市汐止區新台五路一段 88 號 6 樓

**CONTACT PERSON**  
聯絡人

: -

**DATE OF SUBMISSION**  
送樣日期

: May 07, 2019  
2019 年 05 月 07 日

**PERFORMANCE PERIOD**  
測試日期

: May 07, 2019 to May 15, 2019  
2019 年 05 月 07 日至 2019 年 05 月 15 日

**SAMPLE DESCRIPTION**  
樣品描述

: MPS BATTERY PACK (ROME)

**ITEM NO.**  
產品型號

: MBP-BR36S5M02.L4 (BMS: BS5 / Cell A)  
MBP-BR36S5M02.L6 (BMS: BS5 / Cell B)  
MBP-BR36S5M02.L10 (BMS: BS5 / Cell C)  
MBP-BR36S6M02.L4 (BMS: BS6 / Cell A)  
MBP-BR36S6M02.L6 (BMS: BS6 / Cell B)  
MBP-BR36S6M02.L10 (BMS: BS6 / Cell C)  
MBP-BR36S5M03.L4 (BMS: BS5 / Cell A)  
MBP-BR36S5M03.L6 (BMS: BS5 / Cell B)  
MBP-BR36S5M03.L10 (BMS: BS5 / Cell C)  
MBP-BR36S6M03.L4 (BMS: BS6 / Cell A)  
MBP-BR36S6M03.L6 (BMS: BS6 / Cell B)  
MBP-BR36S6M03.L10 (BMS: BS6 / Cell C)

### SUMMARY OF TEST RESULTS 測試結果摘要

TEST REQUESTED 測試要求	CONCLUSION 結論	REMARK 備註
Dimethyl Fumarate Content - European Parliament and Council Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) with its Latest Amendment, Entry 61 富馬酸二甲酯含量-歐盟(EC) No. 1907/2006 法規附錄 17, 第 61 條	PASS 通過	-
Organotin Compounds Content - Regulation (EC) No. 1907/2006 Annex XVII, Entry 20, Points 4 to 6 有機錫含量-歐盟(EC) No. 1907/2006 法規附錄 17, 第 20 條, 第 4-6 點	PASS 通過	-

C/N /TC/ML

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