



# ATTO MOBILITY SCOOTER Flight Safety Certificates

Version 3.0 Released March 2017

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[www.movinglife.com](http://www.movinglife.com)

Take to Airport



**Li-ion**

**DRY BATTERY  
NON SPILLABLE  
48 Volts  
Lithium-Ion**



**FDA  
APPROVED**

**CE**



**BATTERY**

**MOTOR**

TEST REPORT IEC 62133	
Secondary cells and batteries containing alkaline or other non-acid electrolytes – Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications	
Report Number .....	3174113.50
Date of issue .....	2015-10-10
<b>Test specification:</b>	
Standard .....	IEC 62133: 2012 (Second Edition)
Test procedure .....	CB Scheme
Non-standard test method.....	N/A
Test Report Form No.....	IEC62133B
Test Report Form(s) Originator .....	UL(Demko)
Master TRF .....	Dated 2013-03
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Test item description .....	Rechargeable Li-ion Battery
Model/Type reference .....	BT25
Ratings .....	48 Vdc, 5200 mAh, 249,6 Wh

**Copy of marking plate**  
 The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.



The marking plate includes the following information:

- movinglife™** Rechargeable Li-ion Battery (Non-Spillable)
- 249.6Wh** RATING: 48V / 5.2Ah
- Barcode: BT25-IE-1526-10089
- WARNING: To reduce risk of fire or burns, do not disassemble, crush, drop, puncture, short external contacts, over charge, or dispose of in fire or water.
- NOTE: This battery has been tested, certified and complies with United Nations Transport Regulations standard UN38.3 for battery safety during air transport.
- P/N: BT25
- 13ICR18/65-2
- Icons: Recycled (Li-ion), No fire, Wheelchair, No airplane
- Made in China

<b>Testing procedure and testing location:</b>		
<input checked="" type="checkbox"/>	<b>CB Testing Laboratory:</b>	DEKRA Testing and Certification (Shanghai) Ltd.
	Testing location/ address .....	3F, #250 Jiangchangsan Road, Building 16, Headquarter Economy Park Shibeil Hi-Tech Park, Zhabei District, Shanghai, 200436, China
<input type="checkbox"/>	<b>Associated CB Testing Laboratory:</b>	
	Testing location/ address .....	
	Tested by (name + signature) .....	Yong Liu <i>Yong Liu</i>
	Approved by (name + signature) .....	Cliff Lin <i>Cliff Lin</i>



Ref. Certificate No.  
NL-38024

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES  
FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

SYSTEME CEI D'ACCEPTATION MUTUELLE DE CERTIFICATS D'ESSAIS  
DES EQUIPEMENTS ELECTRIQUES (IECEE) METHODE OC

CB TEST CERTIFICATE

CERTIFICAT D'ESSAI OC

Product : Rechargeable Li-ion Battery  
Produit

Name and address of the Applicant : China  
Nom et adresse du demandeur

Rating and principal characteristics : 48 Vdc, 5200 mAh, 249,6 Wh  
Valeurs nominales et caractéristiques principales

Trademark (if any)  
Marque de fabrique (si elle existe)

Type of manufacturer's Testing Laboratories used  
Type de programme de laboratoire d'essais constructeur

Model / Type Ref. : BT25  
Réf. de type

Additional information (if necessary may also be reported on  
page 2)  
Les informations complémentaires (si nécessaire, peuvent être  
indiquées sur la 2ème page)

A sample of product was tested and found to be in conformity  
with IEC : 62133(ed.2)  
Un échantillon de ce produit a été essayé et été considéré  
conforme à la CEI

As shown in the test report Ref. No. which forms part of this  
certificate : 3174113.50  
Comme indiqué dans le rapport d'essais numéro de référence  
qui constitue partie de ce certificat

This CB Test Certificate is issued by the National Certification Body:

Ce Certificat d'essai OC est établi par l'Organisme National de Certification

DEKRA Certification B.V.  
Meander 1051, 6825 MJ  
Arnhem  
The Netherlands



Date: 2015-10-12

Signature: Vicky Zhang

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# 货物运输条件鉴定书

## CERTIFICATE FOR SAFE TRANSPORT OF GOODS

鉴定书编号 DCW201504029  
Certificate No.

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委托方 Client	博科能源系统(深圳)有限公司 ICON ENERGY SYSTEM (SHENZHEN) CO.,LTD		
委托方地址 Add. of Client	深圳市宝安区观澜街道上坑社区高新技术园区金美威 工业园A栋四楼		
样品名称 Description	可充电锂离子电池 Rechargeable Li-ion Battery		
型号规格 Model/Type	BT25		
制造厂 Manufacturer	博科能源系统(深圳)有限公司 ICON ENERGY SYSTEM (SHENZHEN) CO., LTD		
样品编号 Serial No.	1#		
接收日期 Date of Receipt	2015 年	08 月	19 日
	Y	M	D
鉴定日期 Date of Certificate	2015 年	08 月	19 日
	Y	M	D

批准人  
Approved Signatory 

核 验  
Inspected by 

检 查  
Censored by 

鉴定书专用章  
Stamp





# 声 明

鉴定书编号: DCW201504029

Certification No.

## Statement

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1. 本中心是国家质量监督检验检疫总局在华南地区设立的国家法定计量检定机构, 本中心质量管理体系符合ISO/IEC 17020:2012标准的要求。  
This laboratory is the National Legal Metrological Verification Institution in southern China set up by the General Administration of Quality Supervision. The quality system is in accordance with ISO/IEC 17020:2012.
2. 本中心所出具的数据均可溯源至中国计量基准和国际单位制(SI)。  
All data issued by this laboratory are traceable to national primary standards and International System of Units(SI).
3. 鉴定书无广东省计量科学研究院检查报告专用章无效。  
The certification is invalid if it is not affixed the official certification seal of Guangdong Institute of Metrology.
4. 未经本机构许可, 不得部分复制、摘用本鉴定报告书内容。  
This report shall not be reproduced except in full, or extracted, without the written approval of our laboratory.
5. 鉴定书无检查、核验、批准人签字无效。  
The certification is invalid without the signature of Censor, Inspector and Approved Signatory.
6. 鉴定书涂改无效。  
The certification is invalid if it is blotted out.
7. 客户必须如实提供样品及资料, 并保证申报品名和样品与运输货物相同, 否则本单位不承担任何相关责任。  
The client should provide samples and relevant data, at the same time, they should guarantee the consistence of the product's name they declared, the samples they provided and the goods to be transported. Otherwise we will not bear any relevant responsibilities.
8. 本鉴定书的鉴定结论仅对客户所送样品负责。  
The conclusion of this certification is responsible for the sample provided by the client.
9. 本鉴定书当年有效。  
The certification is valid in the year subscribed on it.
10. 本鉴定书不考虑国家及经营人差异。  
The certification takes no account of the State and Operator Variations.



鉴定书编号: DCW201504029

原始记录号: 020154029

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一、本次鉴定的技术依据:

**Reference documents for the certificate:**

IATA (56th)-2015 危险品规则 (56版) Dangerous Goods Regulations (56th)

二、本次鉴定所使用的主要计量标准器具:

**Major standards of measurement used in the certificate:**

设备名称/型号 Name of Equipment /Model	编号 Serial No.	证书号/有效期 Certificate No. /Due Date	计量特性 Metrological Characteristic
电子天平 /TC20KB	332014010050	LZT201404755 /2015-11-18	Ⓓ 级 Class Ⓓ
钢卷尺 Steel Tape /5 m	D1	CDL201502675 /2016-05-20	II 级 Grade II

三、鉴定地点、环境条件:

**Place and environmental conditions of the certificate:**

地点 本院电磁实验 Place 室(Electrics-magnetics Lab)	温度 (20±5) °C Temperature	相对湿度 (40~70) % R.H.
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## 检查结果 RESULTS OF CERTIFICATION

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### 四. 鉴定结果/说明:

#### Results of certificate and additional explanation:

样品名称 Name of goods	可充电锂离子电池 Rechargeable Li-ion Battery	样品型号 Type	BT25
标称电压 Nominal voltage	48 V	额定容量 Rated capacity	5200mAh 249.6Wh
样品外观 Appearance	菱形 Prismatic	样品尺寸 Size(L×W×T)	(285.7×124.8×80.9) mm
包装件重量 Packaging weight	9.3kg	包装件尺寸(L×W×T) Packaging dimensions	(365×272×308) mm
内含电池数量 Battery number	4/包装件 4/packing	本鉴定书的有效期 The period of this certification	2015-12-31
鉴定结论 Certification	<p>1. 该样品为锂离子/聚合物电池, 已通过 UN38.3 测试。 This sample is lithium ion/polymer battery. This battery sample is proved to meet the Requirements tests in the UN <i>Manual of Tests and Criteria</i>, Part III, subsection 38.3.</p> <p>2. 根据 IATA DGR 规定, 本品受 DGR 包装说明 965 第 IA 章节限制, 属于第 9 类危险品。UN 编号为: UN3480 According to IATA DGR, this product is restricted to IATA DGR packing Instruction 965 Section IA, and belongs to Class 9 of dangerous goods. UN number: UN3480</p> <p>3. 其包装件须满足 DGR 包装说明 5.0.2 的一般包装要求和 II 级包装性能标准。 The package must meet the Packing Requirements of 5.0.2 and Packing Group II performance standards.</p>		





# 检查结果

## RESULTS OF CERTIFICATION

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<p>本鉴定书依据的检测报告信息 Reference test reports for this certificate report.</p>	<p>鉴定机构: 广东省计量科学研究所 锂电池 UN38.3 检测报告号: DCW201504028 Certificate laboratory: Guangdong Institute of Metrology Lithium ion battery UN38.3 Test Report number: DCW201504028</p>
<p>备注 Comment</p>	<p>1. 电池和电芯必须包装在完全封装的内包装中然后再装进坚固的外包装中。 Cells and batteries must be placed in inner packagings that completely enclose the cell or battery then placed in an outer packaging.</p> <p>2. 每块电池必须配置安全排气装置, 或者在正常运输条件下其设计本身可防止爆裂, 并采用有效预防外部短路的方法进行装配。为阻挡危险性反向电流, 每个含有电池芯或多个并联电池芯的电池应采用有效的方法进行装配。 Each battery must be incorporated a safety venting device or be designed to preclude a violent rupture under conditions normally incident to transport and be equipped with an effective means of preventing external short circuits. Each battery containing cells or series of cells connected in parallel must be equipped with an effective means, as necessary, to prevent dangerous reverse current flow.</p> <p>3. 每个包装件必须贴有第9类危险品标签。货机运输的每个包装件电池净重不能超过35kg, 客机运输不能超过5kg。 Each package must be labeled with a Class 9 label. The limit net quantity of each package for Cargo Aircraft is 35kg, and 5kg on Passenger.</p>



# 检查结果

## RESULTS OF CERTIFICATION

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### 样品照片 Photos of the Sample :

#### 电池 Battery



#### 包装件 Package





## Material Safety Data Sheet

### Section 1-Chemical Product and Company Identification

#### Product Identification

Lithium-Ion Polymer Battery	
Model:	IP285
Nominal Voltage:	48.1V
Nominal Capacity:	5200mAh
Equivalent Lithium content:	250.12Wh
Testing Period:	Jan 02, 2015

#### Manufacturer

ICON ENERGY SYSTEM (SHEN ZHEN) Co., Ltd.

Block A, 4/F, Jinmeiwei Industrial Park, Guanlan Hi-tech Industrial Park, Shangkeng Community,  
Guanlan Street, Baoan District, Shenzhen, Guangdong Province, P.R.C

contact person : Read  
Telephone : +86-755-89686903  
Fax : +86-755-89686113

### Section 2-Composition/Information on Ingredients

Ingredients	Weight%	CAS Number
Lithium Cobalt Oxide	36 ~ 40%	12190-79-3
Graphite powder	22 ~ 25%	7782-42-5
Aluminum foil	5 ~ 10%	7429-90-5
Copper foil	12 ~ 15%	7440-50-8
LiPF <sub>6</sub>	12 ~ 15%	21324-40-3

### Section 3-Hazards Identification

#### Health Hazards (Acute and Chronic)

These chemicals are contained in a sealed can. Risk of exposure occurs only if the battery is mechanically or electrically abused. Contact of electrolyte and extruded lithium with skin and eyes should be avoided.

#### Sign/Symptoms of Exposure

A shorted battery can cause thermal and chemical burns upon contact with the skin. May be a reproductive hazard.

### Section 4-First-aid Measures

#### Eye

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

#### Skin

Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid.

#### Inhalation

Remove from exposure and move to fresh air immediately. Use oxygen if available.

#### Ingestion

Give at least 2 glasses of milk or water. Induce vomiting unless patient is unconscious. Call a physician.

### Section 5-Fire Fighting Measures

Flash Point: N/A.

Auto-Ignition Temperature: N/A.

Extinguishing Media: Water, CO<sub>2</sub>.

Special Fire-Fighting Procedures



Self-contained breathing apparatus

#### **Unusual Fire and Explosion Hazards**

Cell may vent when subjected to excessive heat-exposing battery contents.

#### **Hazardous Combustion Products**

Carbon monoxide, carbon dioxide, lithium oxide fumes

### **Section 6-Accidental Release Measures**

#### **Steps to be Taken in Case Material is Released or Spilled**

If the battery material is released, remove personnel from area until fumes dissipate. Provide maximum ventilation to clear out hazardous gases. Wipe it up with a cloth, and dispose of it in a plastic bag and put into a steel can. The preferred response is to leave the area and allow the battery to cool and vapors to dissipate. Provide maximum ventilation. Avoid skin and eye contact or inhalation of vapors. Remove spilled liquid with absorbent and incinerate.

#### **Waste Disposal Method**

It is recommended to discharge the battery to the end, to use up the metal lithium inside the battery, and to bury the discharged battery in soil.

### **Section 7-Handling and Storage**

The battery should not be opened, destroyed or incinerate, since they may leak or rupture and release to the environment the ingredients that they contain in the hermetically sealed container.

Do not short circuit terminals, or over charge the battery, forced over-discharge, throw to fire; Do not crush or puncture the battery, or immerse in liquids.

#### **Precautions to be taken in handling and storing**

Avoid mechanical or electrical abuse. Store preferably in cool, dry and ventilated area, which is subject to little temperature change. Store at high temperatures should be avoided.

Do not place the battery near heating equipment, nor expose to direct sunlight for long periods.

#### **Other Precautions**

The battery may explode or cause burns, if disassembled, crushed or exposed to fire or high temperatures. Do not short or install with incorrect polarity.

### **Section 8-Exposure Controls/Personal Protection**

#### **Respiratory Protection**

In case of battery venting, provide as much ventilation as possible. Avoid confined areas with venting cell cores. Respiratory Protection is not necessary under conditions of normal use.

#### **Ventilation**

Not necessary under conditions of normal use.

#### **Protective Gloves**

Not necessary under conditions of normal use.

#### **Other Protective Clothing or Equipment**

Not necessary under conditions of normal use.

#### **Personal Protection is recommended for venting battery**

Respiratory Protection, Protective Gloves, Protective Clothing and safety glass with side shields

### **Section 9-Physical and Chemical Properties**

**Appearance characters:** Silvery-white, prismatic, odorless, solid battery

**Chemical Uses:** Digital electronic products

### **Section 10- Stability and Reactivity**

#### **Stability**

Stable

#### **Conditions to Avoid**

Heating, mechanical abuse and electrical abuse



**Hazardous Decomposition Products**

N/A

**Hazardous Polymerization**

N/A

If leaked, it is forbidden to contact with strong oxidizers, mineral acids, strong alkalis, halogenated hydrocarbons.

**Section 11-Toxicological Information**

Inhalation, skin contact and eye contact are possible when the battery is opened.

Exposure to internal contents, the corrosive fumes will be very irritating to skin, eyes and mucous membranes.

Overexposure can cause symptoms of non-fibrotic lung injury and membrane irritation.

**Section 12 Ecological Information**

Lithium polymer batteries do not contain heavy metals as defined by the European directives 2006/66/EC Article 21.

Mercury has not been "intentionally introduced (as distinguished from mercury that may be incidentally present in other materials)" in the sense of the U.S.A. "Mercury-Containing and Rechargeable Battery Management Act" (May 13 1996).

The Regulation on Mercury Content Limitation for Batteries promulgated on 1997-12-31 by the China authorities including the State Administration of Light Industry and the State Environmental Protection Administration defines 'low mercury' as 'mercury content by weight in battery as less than 0.025%', and 'mercury free' as 'mercury content by weight in battery as less than 0.0001%'. And therefore: Icon Energy System lithium polymer batteries belong to the category of mercury-free battery (mercury content lower than 0.0001%).

When promptly used or disposed the battery does not present environmental hazard. When disposed, keep away from water, rain and snow.

**Section 13-Disposal Considerations**

USA: Lithium polymer batteries are classified by the federal government as non-hazardous waste and are safe for disposal in the normal municipal waste stream. These batteries, however, do contain recyclable materials and are accepted for recycling by the Rechargeable Battery Recycling Corporation's (RPRC) Battery Recycling Program. Please go to the RPRC website at [www.rbr.org](http://www.rbr.org) for additional information.

In the European Union, manufacturing, handling and disposal of batteries is regulated on the basis of the DIRECTIVE 2006/66/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 6 September 2006 on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC. Customers find detailed information on disposal in their specific countries using the web site of the European Portable Batteries Association ([http://www.epb.europa.net/legislation\\_national.html](http://www.epb.europa.net/legislation_national.html)).

Importers and users outside EU should consider the local law and rules.

In order to avoid short circuit and heating, used lithium polymer batteries should never be stored or transported in bulk. Proper measures against short circuit are:

- Storage of batteries in original packaging
- Coverage of the terminals
- Embedding in dry sand





### Section 14-Regulatory Information

Marking consideration:	European Union: According to Directive 2006/66/EC, the batteries have to be marked with the crossed wheel bin symbol.
	Lithium ion batteries, which contain electronic modules (e.g. PCM) and which are subjected to the EMC directive 93/97/EEC, must be CE approved and must wear the CE marking.
	According to Dangerous Goods Regulations (see 15.) battery packs have to be marked with the Watt-hour rating.
International safety standards:	The basis cells are approved according to UL 1642
Water hazard class:	(according to German Federal Water Management Act) Non-water pollution according to VwVwS Appendix 1 (No. 1443 and 766)

### Section 15-Transport Information

This report applies to by sea, by air and by land;

The Li-ion Battery (model: IP285) tested according to the requirements of the 5<sup>th</sup> revised edition of the UN manual of tests and Criteria, Part III, subsection 38.3;

Lithium ion battery was protected so as to prevent short circuits. This includes protection against contact with conductive materials within the same packaging that could lead to short circuit;

The LITHIUM ION BATTERY according to Section II/Section IB of PACKING INSTRUCTION 965, or Section II of PACKING INSTRUCTION 966-967 of the 2015 IATA Dangerous Goods regulations 56<sup>th</sup> Edition may be transported and applicable U.S.DOT regulations for the safe transport of Li-ion Battery.

More information concerning shipping, testing, marking and packaging can be obtained from label master at <http://www.labelmaster.com/>.

The packaging shall be adequate to avoid mechanical damage during transport, handling and stacking. The materials and pack design shall be chosen so as to prevent the development of unintentional electrical conduction, corrosion of the terminals and ingress of moisture.

The package must be handled with care and that a flammability hazard exists if the package is damaged;

Each package must be labeled with a Li-ion Battery handling label or in addition to the Class 9 hazard label.

With regard to transport, the following regulations are cited and considered:

- The International Civil Aviation Organization (ICAO) Technical Instructions.
- The International Air transport Association (IATA) Dangerous Goods Regulations.

UN number of lithium battery: UN3480 or UN3481;

UN Proper shipping name/Description (technical name): Lithium ion batteries or Lithium ion batteries contained in equipment or Lithium ion batteries packed with equipment;

UN Classification (Transport hazard class): Dangerous;

Marine pollutant (Y/N): N;

- The International Maritime Dangerous Goods (IMDG) Code.

For lithium-ion batteries by sea, provided that packaging is strong and prevent the products from short-circuit.

UN number of lithium battery: UN3480 or UN3481;

UN Proper shipping name/Description (technical name): Lithium ion batteries or Lithium ion batteries contained in equipment or Lithium ion batteries packed with equipment;

UN Classification (Transport hazard class): Non dangerous;

Marine pollutant (Y/N): Y;

Special Provision; International maritime dangerous goods code (IMDG) 188, 230, 310, 348, 957,

- The US Hazardous Materials Regulation (HMR) pursuant to a final rule issued by RSPA
- The Office of Hazardous Materials Safety within the US Department of Transportations' (DOT) Research and Special Programs Administration (RSPA)



### **Section 16-Other Information**

This information is not effective to all the batteries manufactured by Ikon Energy System Co., Ltd. This information comes from reliable sources, but no warranty is made to the completeness and accuracy of information contained. Ikon Energy System Co., Ltd. doesn't assume responsibility for any damage or loss because of misuse of batteries. Users should grasp the correct use method and be responsible for the use of batteries.

For more information  
please contact  
Moving Life



US (347) 761-3317

UK (020) 3769 7530

SG (53) 159 1348



[info@movinglife.com](mailto:info@movinglife.com)

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