

# Air travel with the LiFe battery for Pro-B3

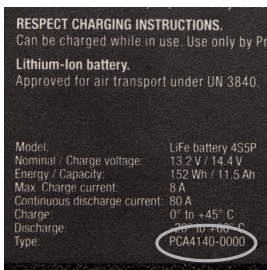


## General information

The general restrictions for travelling by air with batteries is set by IATA dangerous goods regulations (IATA-DGR). The restrictions for passengers carrying a rechargeable Lithium-ion onboard depends on the Watt-hour (Wh) rating of the battery. Different restrictions also apply depending if the battery is installed in

the equipment or brought as spare (extra) battery. A general requirement for allowing a Lithium-ion battery onboard is that it is tested and certified for air transport in accordance with Part III, Sub-section 38.3 of the UN Manual of Tests and Criteria.

## LiFe battery for Pro-B3



There are two separate versions of the LiFe battery for Pro-B3 available. Both versions are tested and certified for air transport in accordance with Part III, Sub-section 38.3 of the UN Manual of Tests and Criteria (see separate UN transportation certificates).

The specific battery version is identified by the Type number which can be found on the battery type label (see image) and on the UN transportation certificate. The Watt-hour rating of the LiFe battery for Pro-B3 is 151.8Wh (Type number PCA4140-0000) or 126.72Wh (Type number PCA4140-0001).

To the right you will find an extract of the IATA provisions for Li-Ion batteries rated over 100Wh but less than 160Wh carried by passenger or crew for personal use.

## Batteries installed in equipment

Approval of the operator is required	Yes
Permitted in or as checked baggage	Yes
Permitted in or as carry-on baggage	Yes
The pilot-in-command must be informed of the location	No

## Spare batteries

Approval of the operator is required	Yes
Permitted in/as checked baggage	No
Permitted in/as carry-on baggage	Yes (max 2)
The pilot-in-command must be informed of the location	No

## Additional notes

Always seek approval with the airline operator when booking your flight.

If the battery is installed in equipment this must be packaged so it won't accidentally turn on during the flight.

Spare batteries should be packed individually or battery terminals taped to prevent short circuit of batteries during the flight.

## Important notice

### Damaged batteries

Batteries that are damaged or defect or batteries that are suspected to be damaged or defect, are strictly forbidden to transport by air. Such batteries can only be transported by road or sea and only in full compliance with applicable dangerous goods regulations. (Special Provision A154, IATA-DGR & ICAO-TI)

### Links to more information

<http://www.iata.org/whatwedo/cargo/dgr/Pages/dgr-guidance.aspx>

<http://www.iata.org/whatwedo/cargo/dgr/Documents/passengerprovisions-table-23A-en.pdf>

<http://www.iata.org/whatwedo/cargo/dgr/Documents/passengerlithium-battery.pdf>

### UN transportation certificates

See separate pages.

# CERTIFICATION FOR LITHIUM BATTERY

## TRANSPORTATION CERTIFICATE

Concerning the transport according to the dangerous goods regulations of the different transport modes as in force since January, 1st 2003 and changes effective from 2011

WE HEREWITH CERTIFY THAT EACH BATTERY PACK IS OF THE TYPE PROVED TO MEET THE REQUIREMENTS OF EACH APPLICABLE TEST IN THE UN MANUAL OF TESTS AND CRITERIA, PART III, SUB-SECTION 38.3

UN No. / Shipping name:	UN 3480 LITHIUM ION BATTERY UN 3481 LITHIUM ION BATTERY packed with equipment / contained in equipment
Certified Product:	Accumulator - Rechargeable
Model Designation:	LiFe battery 4S5P ANR26650M1 (13,2V/11,5Ah)
Article Number:	BMZ 12294 / Type: PCA4140-0000
Certificate Holder:	Profoto AB, SE-128 21 Skarpnäck

PERFORMED TESTS	RESULTS
38.3.4.1 Test 1: Altitude Simulation	passed
38.3.4.2 Test 2: Thermal Test	passed
38.3.4.3 Test 3: Vibration	passed
38.3.4.4 Test 4: Shock	passed
38.3.4.5 Test 5: External Short Circuit	passed
38.3.4.6 Test 6: Impact	not required for battery packs
38.3.4.7 Test 7: Overcharge	passed
38.3.4.8 Test 8: Forced-Discharge	not required for battery packs

▶ Watt-hour rating of the battery pack: 151,80 Wh ◀



This lithium ion battery pack has to be declared and shipped as **DANGEROUS GOODS "Class 9"**. According to Packing Instruction 965 (UN 3480) or 966/967 (UN 3481), Section I - Fully Regulated Class 9 Lithium Ion Cells and Batteries - of the IATA-DGR and Packing Instruction P903 of the ADR and IMDG Code. ▶ THE DANGEROUS GOODS LABEL "CLASS 9" IS REQUIRED ◀

2010-04-30

Date of issue

Signature: Sven Bauer

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## TRANSPORTATION CERTIFICATE

Concerning the transport according to the dangerous goods regulations of the different transport modes as in force since January, 1st 2003 and changes effective from 2013

WE HEREWITH CERTIFY THAT EACH BATTERY PACK IS OF THE TYPE PROVED TO MEET THE REQUIREMENTS OF EACH APPLICABLE TEST IN THE UN MANUAL OF TESTS AND CRITERIA, PART III, SUB-SECTION 38.3, REV. 5, AMEND. 1

**CERTIFICATE/REPORT NO.: BU-2013-000561-UN**

**UN No. / Shipping name:** UN 3480 LITHIUM ION BATTERY  
UN 3481 LITHIUM ION BATTERY  
packed with equipment / contained in equipment

**Certified Product:** LITHIUM ION BATTERY (rechargeable)

**Model Designation:** 4S4P ANR26650M1B (13.2V/9.6Ah)

**Article Number:** BMZ No. 21244 / Profoto No. PCA4140-0001

**Certificate Holder:** ProFoto AB  
Box 1264 · SE-17225 Sundbyberg · Sweden

PERFORMED TESTS	RESULTS
38.3.4.1 Test 1: Altitude Simulation	passed
38.3.4.2 Test 2: Thermal Test	passed
38.3.4.3 Test 3: Vibration	passed
38.3.4.4 Test 4: Shock	passed
38.3.4.5 Test 5: External Short Circuit	passed
38.3.4.6 Test 6: Impact/Crush	not applicable
38.3.4.7 Test 7: Overcharge	passed
38.3.4.8 Test 8: Forced Discharge	not applicable

▶ Watt-hour rating of the battery pack: 126,72 Wh ◀

As the Watt-hour rating of the battery pack is more than 100 Wh, this lithium ion battery pack has to be declared and shipped as **DANGEROUS GOODS "Class 9"**. According to Packing Instruction 965 (UN 3480) or 966/967 (UN 3481), Section I – Fully Regulated Class 9 Lithium Ion Cells and Batteries - of the IATA-DGR and Packing Instruction P903 of the ADR and IMDG Code. ▶THE DANGEROUS GOODS LABEL "CLASS 9" IS REQUIRED◀



04.Dec.2013

Date of issue

Signature: Sven Bauer, CEO

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