International Shipping Compliances

This guide will give you all the essential information needed for traveling and shipping Wildlife Computers lithium-ion tags.



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IATA Regulations

According to IATA, small lithium metal batteries contained within equipment are eligible for transport on passenger aircrafts. Small lithium metal batteries are defined as:

- <1 g of lithium metal per cell
- <2 g of lithium metal per battery
- <5 kg net weight of batteries in the package

Packaging Requirements

No special markings are required for air transit of "small" batteries contained in equipment in quantities of less than four cells or less than two batteries per package.

The following markings and forms are required for packages with more than four cells or more than two batteries per package:

- 1. Lithium battery caution label containing UN packaging classification number UN3091
 - *a.* If it isn't on the sticker, please write the following next to it: UN3091, PI 970, Section II
- 2. Informational document stating the following—" UN3091, PI 970, Section II. This package contains lithium metal cells or batteries. The package must be handled with care and a flammability hazard exists if the package is damaged. Special procedures must be followed in the event the package is damaged, to include inspection and repacking if necessary."
- 3. The Wildlife Computers telephone number—+1 (425) 884 3048—in case there are any shipment issues or questions.
- 4. If sending via UPS only (<u>UPS Lithium Battery Instruction Guide</u>), a <u>Lithium Battery Safety form</u> is required. See example below.



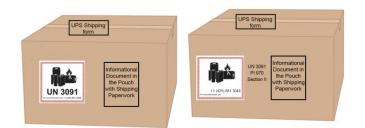


Figure 2—Markings required for shipping small lithium metal batteries contained in equipment. Label on the left with UN number, label on the right label without UN number



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UPS Customer Center—Lithium Battery Safety Document for Air and Ground Packages

WARNING: LITHIUM BATTERIES THAT HAVE BEEN RECALLED BY THE MANUFACTURER FOR SAFETY REASONS MUST NOT BE SHIPPED BY AIR. MEDIUM LITHIUM BATTERIES MUST NOT BE SHIPPED BY AIR.

Terminology:

- Cell electrochemical unit, consisting of an anode and a cathode, capable of generating electrical current
- Battery assembly of cells
- Lithium ion cells/batteries generally rechargeable includes lithium polymer cells/batteries
- Lithium metal cells/batteries non-rechargeable

This shipment contains lithium cells or batteries in the following configuration (check applicable description):

Air and International Packages							
Small Lithium Ion – Maximum of	Small Lithium Metal – Maximum of						
20 Watt-hours (Wh) per cell or	1 gram of lithium metal per cell or						
100 Watt-hours per battery	2 grams of lithium metal per battery						
Contained in equipment: More than 4 cells or 2 batteries installed in electronic equipment with no other batteries in the package. (Less than 4 cells or 2 batteries, no special documents or labels required) Note: Which effective is in the short 5 be (11 B)	Contained in equipment: More than 4 cells or 2 batteries installed in electronic equipment with no other batteries in the package. (Less than 4 cells or 2 batteries, no special documents or labels required)						
 Net Weight of batteries is less than 5 kg (11 LB). Packed with equipment: No more than 8 cells or 2 batteries in a package with electronic equipment, but not installed in the electronic equipment. 	 Net Weight of batteries is less than 5 kg (11 LB). Packed with equipment: No more than 8 cells or 2 batteries in a package with electronic equipment, but not installed in the electronic equipment. 						
Net Weight of batteries is less than 5 kg (11 LB).	Net Weight of batteries is less than 5 kg (11 LB).						
Cells or batteries <u>only</u> : Cells or batteries in a package, without equipment. No more than 2 batteries or 8 cells allowed. However, only one package to a single consignee per day is allowed to be shipped under ICAO rules. Batteries must have less than a 30% state of charge when shipping international via air. Forbidden on passenger aircraft; requires "Cargo Aircraft Only" label. **OR**	Warning: Cells or batteries <u>only</u> : Lithium Metal cells or batteries in a package without electronic equipment are <u><i>not allowed</i></u> to be shipped by air through UPS Customer Centers.						
Cells or batteries of less than 2.7 Wh. Net Weight of batteries is less than 2.5 kg (5.5 LB). Batteries must have less than a 30% state of charge when shipping international via air. Forbidden on passenger aircraft; requires "Cargo Aircraft Only" label.							
	Ground Packages Only (Do not upgrade to air)						
(Excluding AK, HI, PR or any destination served by air)							
Small Lithium Ion – Maximum of	Small Lithium Metal – Maximum of						
20 Watt-hours (Wh) per cell or	1 gram of lithium metal per cell or						
100 Watt-hours per battery	2 grams of lithium metal per battery						
Contained <u>in equipment</u> : Batteries or cells installed in electronic equipment with no other batteries in the package. (Less than 4 cells or 2 batteries, no special documents or labels required) Packed with equipment: Cells and batteries in a package with	 Contained in equipment: Between 4 cells and 8 cells installed in electronic equipment with no other batteries in the package. (Less than 4 cells or 2 batteries, no special documents or labels required) Packed with equipment: Cells and batteries in a package with 						
electronic equipment, but not installed in the electronic equipment.	electronic equipment, but not installed in the electronic equipment.						
Cells or batteries <u>only</u> : Cells or batteries in a package without equipment.	Cells or batteries <u>only</u> : Cells or batteries in a package without equipment.						
Gross package weight no more than 30 kg (66 LB).	 Gross package weight no more than 30 kg (66 LB). 						
Gross package weight no more than 30 kg (66 LB). Medium Lithium Ion – Maximum of							
	Gross package weight no more than 30 kg (66 LB).						
Medium Lithium Ion - Maximum of	Gross package weight no more than 30 kg (66 LB). Medium Lithium Metal – Maximum of						
Medium Lithium Ion – Maximum of 60 Watt-hours per battery	Gross package weight no more than 30 kg (66 LB). Medium Lithium Metal – Maximum of 5 g lithium metal per cell or						

Determine if you intend to ship via air and/or ground

· This package must be handled with care. A flammability hazard exists if the package is damaged.

- If this package is damaged in transportation, it must not be loaded until the condition of the contents can be verified. The batteries contained in this
 package must be inspected for damage and may only be repacked if they are intact and protected against short circuits.
- For more information about the batteries contained in this package, call the following telephone number:

+1 (425) 881-3048

List telephone number here, including area code and any applicable country code



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Battery Isolator Screw

Nearly* all of Wildlife Computers tags fit into the small lithium metal battery shipping category. Even tags with ample battery power are compliant because of the battery isolator screw.

Tags with the isolator screw are shipped with the majority of power cells disconnected. Then, once they arrive at their destination, the screw is inserted which links the individual cells together creating one larger battery.

After connecting the batteries, the tags are classified as Dangerous Goods and must be shipped accordingly unless the screw is removed.

Traveling on an Airline with Tags

IATA classifies a PED (Portable Electronic Device) as any piece of lightweight, electrically-powered equipment. These devices are typically consumer electronic devices capable of communications, data processing and/or utility. Up to 15 PEDs, or possibly more if approved by the airline, can be transported on passenger aircraft if they meet the Watt-hour and lithium metal content requirements below.

Nearly* all of Wildlife Computers tags meet the requirement of <100Wh capacity and <2g of lithium provided the battery isolator screw is not inserted. For further information contact your Wildlife Computers representative.

Note: If travelling with tags, it is advised that you check with the individual carrier on its criteria and rule. Please see the <u>Lithium Battery Passenger Pamphlet</u>.

*Please check with your Wildlife Computers technical consultant for information on your specific tag.

Carriage of portable electronic devices (PED), portable medical electronic devices (PMED) and spare batteries by passengers is dependent on the Watt-hour (Wh) rating for lithium ion (rechargeable) batteries or the lithium metal content for non-rechargeable batteries.

Wh rating or lithium metal content	Configuration	Carry-on baggage	Checked baggage	Operator approval	
≤ 100 Wh / 2g	In equipment (PED or PMED)	Yes (max 15 PED/PMED')	Yes	No ¹	
	Spare battery(ies)	Yes (max 20 spare batteries ²)	No	No ²	
>100 to ≤160Wh	In equipment (PED or PMED)	Yes	Yes	Yes	
	Spare battery(ies)	Yes (max 2 spare batteries)	No	Yes	
>160Wh	Must be prepared and carried as cargo in accordance with the IATA Dangerous Goods Regulations				
> 2g ≤ 8g	In equipment (PMED only)	Yes	Yes	Yes	
	Spare batteries for PMED	Yes (max 2 spare batteries)	No	Yes	

Use the below table to determine if your PED, PMED or spare battery(ies) can be carried.

1. Each person is limited to a maximum of 15 PED. The operator may approve the carriage of more than 15 PED.

2. Each person is limited to a maximum of 20 spare batteries of any type. The operator may approve the carriage of more than 20 batteries.



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Dangerous Goods

IATA classifies tags with more than two grams of lithium as Dangerous Goods. Shipping regulations apply in accordance with UN #3091, Class 9, Section I, Packing Instructions 970.

Certain countries and couriers may have additional regulations beyond the IATA requirements. It is the shipper's responsibility to ensure the shipment meets current <u>IATA</u>, and the courier's current requirements.

Glossary of Terms

- IATA—International Air Transport Association
- Cell—electrochemical unit, consisting of an anode and cathode capable of generating electrical current
- Battery—assembly of cells
- Lithium Ion—rechargeable (solar charging tags)
- Lithium Metal—non-rechargeable (most Wildlife Computers marine tags)



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Contacting Wildlife Computers

U.S. and International

Members of the Wildlife Computers technical sales and support team are located in Redmond, WA, USA, and Havelock North, New Zealand, allowing us to cover promptly a wide range of time zones.

Mailing and Shipping

Wildlife Computers 8310 154th Avenue NE, Suite 150 Redmond, WA 98052 USA

E-Mail

Sales, Quotes, and Inquiries: tags@wildlifecomputers.com Technical Support: support@wildlifecomputers.com

Phone

Website

+1 (425) 881 3048

WildlifeComputers.com

For Asian Clients

While we welcome your direct correspondence, we recommend that you contact our colleague, Yong Huang, for assistance. Mr. Huang understands the special purchase processes for your countries, and will provide you with the best service for the best price. He also is fluent in Japanese, Chinese, and English.

Mailing address—Please ship tags to our main office

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E-mail

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yong.huang@enfo.us

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