

Requirements on Carriage of Lithium Batteries

When passengers carrying portable electronic device (PED) such as cell phones, computers or cameras containing lithium batteries or spare batteries for personal use, the batteries must be of a type which meets the requirements of each test in the UN Manual of Tests and Criteria, Part III, subsection 38.3.

1、 Please confirm the specifications on the lithium battery before boarding. Lithium battery specification is rated by Watt-hour rating. For lithium batteries that do not marked with Watt-hour rating, you can also arrive at the number of Watt-hours provides if you know the battery's nominal voltage (V) and capacity in ampere-hours (Ah):

$$\text{Ah} \times \text{V} = \text{Wh} \quad (1000\text{mAh}=1\text{Ah})$$

Lithium batteries that are not marked or calculated for Watt-hour ratings are forbidden for carriage.



2. Batteries

(1) Spare batteries: including lithium batteries, non-spillable

batteries, nickel-metal hydride batteries and dry batteries. Please note that the following requirements shall be met:

- Spare batteries can be carried only in carry-on baggage;
- Each person is limited to a maximum of 20 spare batteries;
- For lithium metal batteries the lithium metal content must not exceed 2 g;
- For lithium ion batteries the Watt-hour rating must not exceed 100 Wh.



(2) If the above restrictions are exceeded, please carry as following:

① For lithium metal batteries, lithium metal content exceeding 2g but not exceeding 8g:

- Maximum of two spare batteries in carry-on baggage only;
- It needs to be declared at the check-in counter and can only be carried after inspection and approval;
- These batteries must be individually protected to prevent short circuits (eg. By placing each battery in plastic bag or protective pouch);

- Only for portable medical electronic devices.

② For lithium ion batteries Wh rating exceeding 100 Wh but not exceeding 160 Wh:

- Maximum of two spare batteries in carry-on baggage only;
- It needs to be declared at the check-in counter and can only be carried after inspection and approval;
- These batteries must be individually protected to prevent short circuits (e.g. By placing each battery in plastic bag or protective pouch)

3. Power bank (portable charger)

These are portable devices designed to be able to charge consumer devices , such as mobile phones and Wireless headset charging compartment. Power banks are considered spare batteries. Please carry as following:

- It is forbidden to use power bank to charge the PED on the plane;
- It is forbidden to charge the power bank on the plane;
- Power bank shall be turned off during flight.



4、 Portable electronic devices (PED)

(1) Portable electronic devices means the equipment or apparatus for which the batteries provide electrical power for its operation. PED may include cameras, mobile phones, laptops, video cameras, medical devices. PED can be carried as carry-on baggage or checked baggage.

(2) For PED containing lithium batteries, lithium metal content that not exceed 2g , and lithium ion batteries with Watt-hour rating not exceed 100 Wh, if devices are carried in checked baggage, the device must be completely switched off (not in sleep or hibernation mode), unless the devices contain only lithium batteries and for lithium metal batteries not exceed 0.3g, for lithium ion batteries not exceed 2.7 Wh.

Each person is limited to a maximum of 15 PED.

(3) Portable medical electronic devices with lithium metal content exceeding 2g but not exceeding 8g and PED with lithium ion batteries of Wh rating exceeding 100 Wh but not exceeding 160 Wh, needed to be declared at the check-in counter and can only be carried after inspection and approval.

(4) E-cigarettes and electric hover board are not allowed to be carried as checked baggage. These devices can be carried as carry-on baggage after take actions to prevent accidental activation and comply with the requirements of carry-on baggage. These devices cannot be used or charged on the plane.



5、 Battery-powered wheelchairs

Battery-powered wheelchairs for use by passengers whose mobility is restricted by either a disability, their health or age, or a temporary mobility problem :

(1) Battery(batteries) is either:

- adequately protected against damage by the design and securely attached to the mobility aid, the electrical circuits must be isolated following the manufacturer's instructions; or

- removed from the wheelchair following the manufacturer's instructions. Each battery removed from the wheelchair must not exceed 300Wh.

(2) a passenger may carry a maximum of one spare lithium ion battery not exceed 300 Wh or two spare batteries each not exceeding 160 Wh.

(3) battery removed from the mobility and any spare batteries are carried in the passenger cabin. The removed or spare batteries must be protected from damage (e.g. by placing each battery in a protective pouch)

6、Baggage with installed lithium batteries (such as “smart luggage”)

(1) If batteries can be removed:

If lithium metal content not exceeds 2g , and lithium ion batteries with Watt-hour rating not exceed 160 Wh, baggage can be carried in checked baggage or carry-on baggage. When in checked baggage, the batteries must be removed and carried in the passenger cabin.

(2) If batteries can not be removed:

For baggage with lithium metal batteries not exceeding 0.3g, or lithium ion batteries not exceeding 2.7 Wh, the baggage can be carried in checked baggage or carry-on baggage. When in checked baggage, completely switched off is not required. It is forbidden for transport, when exceeds the above limit.

Battery removable or not	lithium metal content /Watt-hour rating	In checked baggage	In carry-on baggage
Can be removed	$\leq 2g/160Wh$	Yes.The batteries must be removed and carried in the passenger cabin.	Yes
Can't be removed	$> 0.3g/2.7Wh$	Forbidden	Forbidden
	$\leq 0.3g/2.7Wh$	Yes	Yes