

USB Charging Block Briefing Sheet

The USB Charging Block is currently the most common type of charging device that our electronic devices, (phones, tablets, etc.) utilize.

These are the typical USB Charging Blocks that you can see being used, some are white, and some are different colors. The color does not signify any approval or rating. Approved or certified devices should be stamped with that information.



Frequently asked questions about USB chargers

To help you understand how to use your USB chargers, we have answered some key questions on the safety of USB charging.

1. Could my USB device be dangerous?

Certified USB devices are in general very safe to use if they are used correctly in accordance with the manufacturer's instructions.

2. What is the difference between a smartphone USB charger and a tablet USB charger?

It is important to check the rating of the chargers, to ensure that the output is correct for your device. Do not simply assume that if they have the same physical connection the output will be the same. A supply of an incorrect charge may result in damage to your device and the potential risk of overheating and fire.

3. What happens if I mix and match a USB charger cable with a USB plug?

There is the potential for an incorrect charge to be applied to your device. This could result in several issues, including battery and device damage and the risk of overheating, fire, and explosion. You should always follow the manufacturer's instructions.

4. Is it safe to plug any USB device into a laptop, tablet, or wall outlet?

In most cases this should be acceptable. Plugging USB devices into "smart" products such as laptops and tablets which monitor and control the output should, in theory, be safer than the use of wall outlets. However, as always, check the manufacturer's instructions.

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5. When should I charge my device with my USB charger?

Best practice advises that you do not leave things charging when you leave the house or are asleep. If you absolutely must, then make sure you have a working smoke alarm.

Voltage and Amperage

The voltage (V) and amperage (amps) of a USB charging system, (i.e., power supply, charging block, cable connector, and connector type) depends on the type of device being charged and for this equipment to be utilized correctly. Not all USB connector cables and chargers are equal. For example, some wall chargers can supply more power than others and one USB socket on a laptop may vary in power from the others.

You will also need to consider amps of the charger and device requirements. Chargers increase the current to provide a higher amount of power quickly – this is measured in amps. The more amps that are required by the device, (e.g. phone, tablet, or battery pack) means the more amps that are required to flow from the wall outlet, through the charging block, through the connector cables, into the device. Therefore, a charger that comes with a smartphone will provide less amps than a charger that come with a tablet. You will need to consider the amps and the equipment you will need to use to enable the use of USB chargers. The manufacturers instructions for the device and/or charger will provide more information and guidance.

USB Charger Certification



A certified USB charger is a charger that has met the strict standards set by the Universal Serial Bus Implementers Forum (USB-IF). This certification means that the charger is safe, reliable, and performs well. Other reliable identification markings you can find on these devices are, Underwriters laboratory (UL), (Qi) Certification, (NYCE) certification as example. In addition, check for a Connected Equipment Warranty (CEW), which covers repairs to damaged equipment.

What does it mean for consumers?

Safety: Certified chargers are designed to prevent overheating and overcharging.

Performance: Certified chargers are designed to provide the right amount of power and charging speed.

Reliability: Certified chargers are designed to maintain efficiency over long periods of use.

Safety Concerns

Of most important: Uncertified USB chargers come with serious safety concerns. Like unofficial batteries, uncertified chargers can be bought at a reduced price online, from overseas or in street shops and these kinds of electrical products may present a higher risk of exploding or catching fire. Not only do they present a risk to you, the use of uncertified chargers may also damage your phone (which in turn could void your guarantee).

Cheap or counterfeit charging devices often fail to meet the requirements of current industry standards and requirements. The money that you save comes with extremely high risks and therefore buying a branded/certified charger is essential to avoid often fatal repercussions.

When not in use, USB Charging Blocks should be unplugged from wall outlets.

Do not use damaged or degraded USB chargers or power cords as these are significant fire hazards.

