USB-C: The Cable Today You'll Need for Tomorrow

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WHAT IS USB TYPE-C™?

“USB” represents the most popular way to charge or connect external devices to a computer.

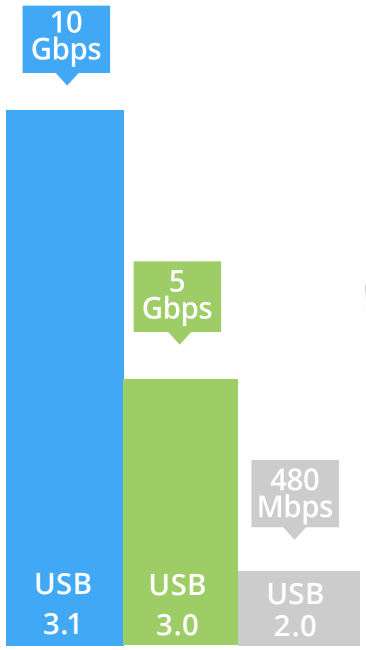
Currently, multiple connector types of USB (Universal Serial Bus) exist, such as USB-A, USB-B, Micro-B and Lightning. But with so many cables, things can get confusing. Once you throw in specifications like USB 2.0 or 3.1, it’s hard to keep track of everything.

Here’s what you need to know:

USB 2.0, 3.0 and 3.1 are USB standards, and indicate different versions, of USB. The most common spec is USB 2.0 and the newest is USB 3.1. Each revision to the spec has significantly changed the data transfer speeds and slightly changed the power, but in order to get to the next level of charging and data transfer they needed to update the connection. Now with USB-C, both power and data transfer speeds have dramatically improved.

USB-C was created to allow the full functionality of USB 3.1 but also can be built with other versions of the spec (2.0 and 3.0). **USB-C will eventually replace all existing USB connectors**.

Confused yet? Don’t worry! Keep reading for a better understanding of all things USB-C.



Data Transfer Rates

IMPORTANT DEFINITIONS

USB-C isn't just another new development - it's quickly becoming the industry standard for mobile devices, chargers and computers. Benefits of USB-C include speed, ease of use and universality. Here are a few of the other important things to know about USB-C.

Backwards Compatibility
Refers to compatibility with preexisting models or versions of the same type of product

Charge/Power
The supply of energy within an electrical device

Data Transfer
The process of using computing techniques and technologies to transfer electronic or analog data in the form of bits and bytes between devices through a digital or analog medium

Data Transfer Rate
The speed at which a device or network component can send and receive data

GBPS
An acronym for "gigabits per second", a data transfer speed measurement for high-speed networks. The larger the number of gbps, the quicker the download

USB-C
The newest USB connection. Also referred to as Type-C, USB-C has the ability to support the newest USB technology with high data transfer rates and a substantial increase in power capability

Connector Types
The part of the cable that plugs into a port to connect one device to another

USB-IF
USB Implementers' Forum (USB-IF) is a non-profit corporation founded by the group of companies that developed the Universal Serial Bus (USB) specification as a support organization and forum for the advancement and adoption of USB technology

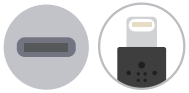
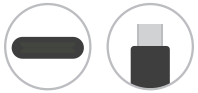
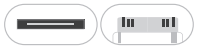
Watts
This one is a simple math equation.
"Amps of your Charger x Volts of the Charger = Available Watts "

CONNECTOR TYPES

Whether it’s an iPhone, Samsung Galaxy, iPad Pro or Google Pixel, most of us own various tech devices and know the names of every device we’re using.

However, it may not be as clear to know the names of each **type** of **connector** those devices utilize.

See the chart on the next page to find the devices you use and how they will work with USB-C.

1. Find Your Device Here	2. Type of Connector	3. Recommendation
iPhones 5 - 11 iPad Air 2 iPad Air	Lightning 	USB-C to Lightning Cable
iPhone 11 Pro | iPad Pro Macbook | Android Google Chromebook Pixel Nintendo Switch	USB-C 	USB-C to USB-C Cable
USB Flash Drive Keyboard Mouse	2.0 USB-A [Male] 	3.0 USB-C to USB-A Adapter
PC USB-A Charger	2.0 USB-A 	2.0 USB-A to USB-C Cable
PC	3.0 USB-A 	3.0 USB-C to USB-A Adapter
Printer Scanner External Hard Drive	USB-B 	2.0 USB-C to USB-B Adapter
Digital Camera Action Camera	Mini-B 	3.0 USB-C to USB-A Adapter
Android | Google Pixel LG | Tablet 2.0 External Hard Drive	Micro USB 	2.0 USB-C to Micro USB Cable or Adapter
3.0 External Hard Drive	Micro-B 	3.0 USB-C to USB-A Adapter
iPhone 3 - 4 iPad (1st, 2nd, 3rd gen) iPod	Apple Dock 30 Pin 	3.0 USB-C to USB-A Adapter

FIND THE RIGHT USB-C CABLE OR ADAPTER FOR YOUR DEVICE

Shop USB-C

THE BENEFITS OF USB-C

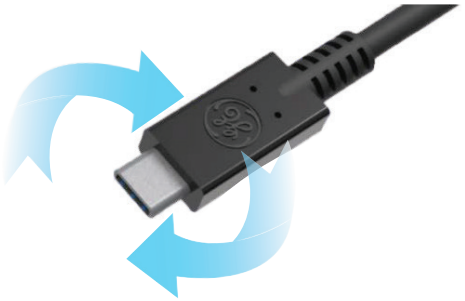
USB-C can help reduce the amount of cables needed. For example, a single USB-C to C cable can charge either a phone or a laptop as long as both devices have a USB-C port. With that one cable, you can transfer data at higher speeds, charge and power other devices and deliver audio and 4K video to 4K display.

USB-C Gives You:

More Speed
(10 Gbps)

More Power
(Up to 100W Charging)

More Pixels
(4k Displays)



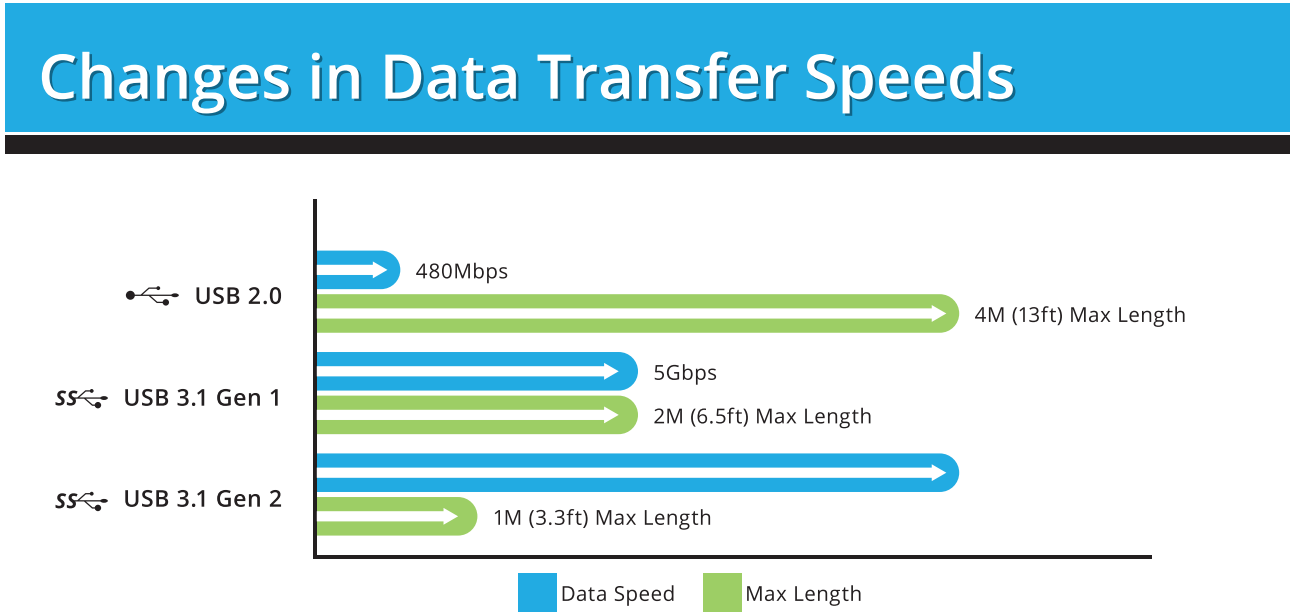
More Flexibility
(Reversible Port)

POWER DELIVERY & DATA SPEEDS

The power capability of USB-C is another aspect of the advancement that makes it exciting. It also supports the newest data standard. This means it will support a top speed up to 10 Gigabits per second.

Consider this: USB-C allows for us to transfer 20 times faster data speeds than USB 2.0, the widely used USB standard today. This means with USB-C, you can transfer a 4K movie to an external hard drive in just 30 seconds.

When it comes to power output, USB-C can deliver 100 watts of power and will work with devices that require anywhere from 5 to 20 volts.



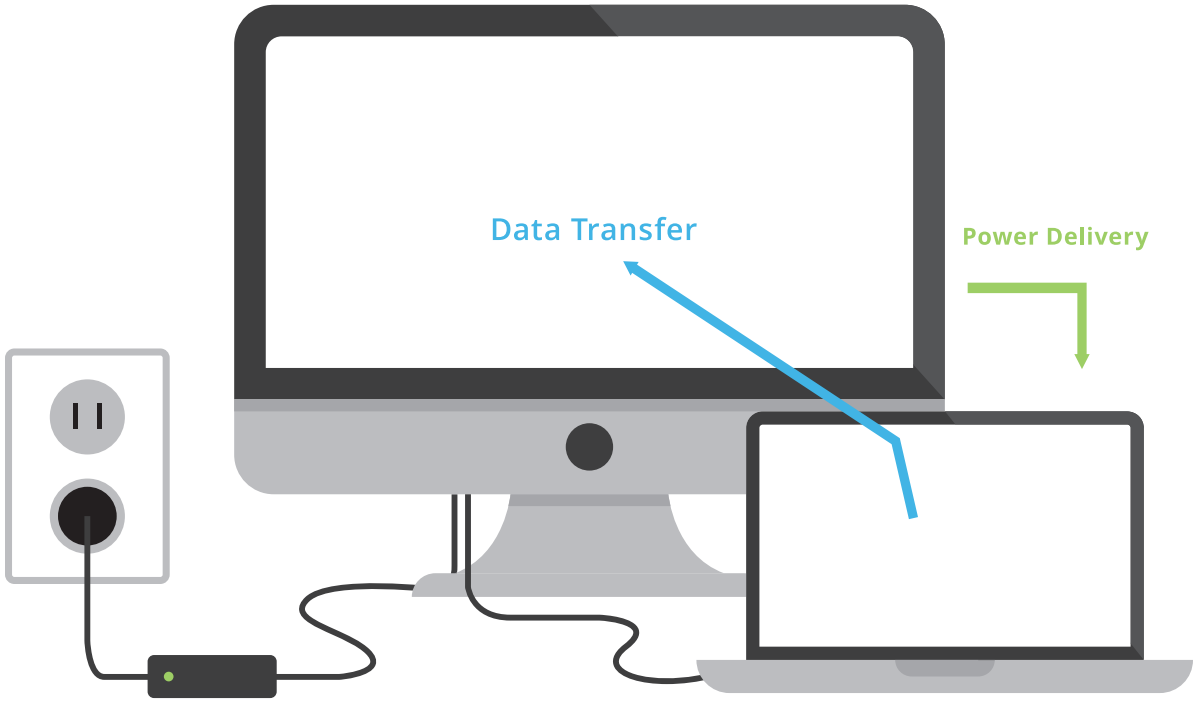
A SMARTER CONNECTION

Users will be able to specify whether they want devices to act as USB hosts or peripherals.

As an example, a smartphone can be “told” to act as a hard drive when it is plugged into a laptop. This will enable you to easily access files and multimedia if you choose to do so.

Furthermore, USB-C is bidirectional, meaning a device can either send or receive power and that power can even be delivered while the device is also transmitting data over the connection.

For example, now there is no need for a video cable and an additional charging cable.
If you have a monitor plugged into the wall, you can use that monitor plugged into the wall to power your laptop, and at the same time, the laptop can also send data to the monitor, all with one cable.



BACKWARDS COMPATIBILITY

While USB-C will eventually become the universal standard, old forms of USB are simply too prevalent to ignore.

As such, users will be able to utilize USB-C with USB A, but adapters are required because the physical connector isn't backwards compatible even while the underlying standard is. This means 3.1 is compatible with 3.0 and 2.0 specifications, but a USB-C connector **will not** fit into a USB-A port.

Consumers should not immediately throw out their old USB cables and adapters. For the time being, most manufacturers will make a slow transition to USB-C by including it and USB-A ports on devices such as laptops.

The good news is there are adapters available to connect new devices with older external displays, hard drives and routers. These devices utilize HDMI, USB-A, VGA and Ethernet, for example.

Consumers should not immediately throw out their old USB cables and adapters.

FREQUENTLY ASKED QUESTIONS (FAQ)

Why is USB-C better than previous versions of USB?

With USB-C, you will get more speed, more power, more pixels, more flexibility and more protocols than all the other cables.

What is the difference between USB 3.1 and Type-C?

Type-C refers to the physical connector type of the USB cable while USB 3.1 is a type of standard and newest version of USB technology and dictates the data transfer speed.

What devices currently use USB-C?

There are various devices out there today such as laptops, phones, tablets, flash drives, etc. that use USB-C including Apple, Google, Samsung and Sandisk products among many others. It is a prediction that eventually all devices will be using USB-C technology and dictates the data transfer speed.

Can USB-C be used with other USB devices?

USB-C or Type-C is fully compatible with USB devices but will need an adapter as the ports are physically different.

USB-C PRODUCTS

As the world moves toward USB-C it doesn't mean you have to replace all of your current devices, you just need the right USB-C cable or adapter. Jasco is here to help consumers with all of their cable needs as the industry is slowly but surely adopting a new standard.

All accessories serve different but important functions by allowing users to either sync existing devices with the new USB-C devices or charge their new USB-C products.

USB-C offers numerous benefits that are immediately noticeable, such as data transfer speeds and ease of use. Why wait a few minutes to transfer hundreds of images to an external hard drive, when it's possible to finish the process in seconds?

Shop Products Here

Sources

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