

WHAT YOU DON'T KNOW ABOUT USB CHARGING

BY KEVIN KOHL

Product Manager, Electrical Wiring Systems Division



In the relationship between a smartphone and a USB charging port, it's the phone that has the power.

That's because mobile devices, like phones and tablets, largely determine how much power they draw when charging. Yet many people believe it's the USB port that's in control. That's just one of the common misconceptions surrounding USB charging. Another is the amount of power a device needs to charge.

Dispelling these myths is important because USB chargers, like those integral to a receptacle, are becoming more common in commercial, public and residential settings as the number of mobile devices people own continues to grow. Users prefer USB charging because of the convenience: They don't have to carry around a charging brick or AC adapter.

However, many end users, specifiers, and professional installers do not fully understand the USB charging needs for their space. Often, they're operating under the assumption that more power advertised at the USB charging receptacle equals faster charging — for example, that a USB receptacle with 5-amps of charging capacity will always charge devices faster than a 2-amp product.

THERE ARE THREE SIGNIFICANT PROBLEMS WITH THAT THINKING:

- 1 Again, the mobile device determines how much current to draw from a port. Current draw is largely based on the device's internal electrical schematic and also how much charge it needs. A phone with 5% battery life will usually demand more current than it will at 90%.
- 2 Most devices need far less power than people realize, as we'll show in the next section.
- 3 The total amperage advertised at the receptacle is typically shared across ports. A phone plugged into a 5-amp receptacle with four ports is not getting all 5 amps.

MOBILE FACTS

79% of people say their smartphone makes them feel productive

Source

60% of people in all major cities reported anxiety from a low or dead cell phone battery

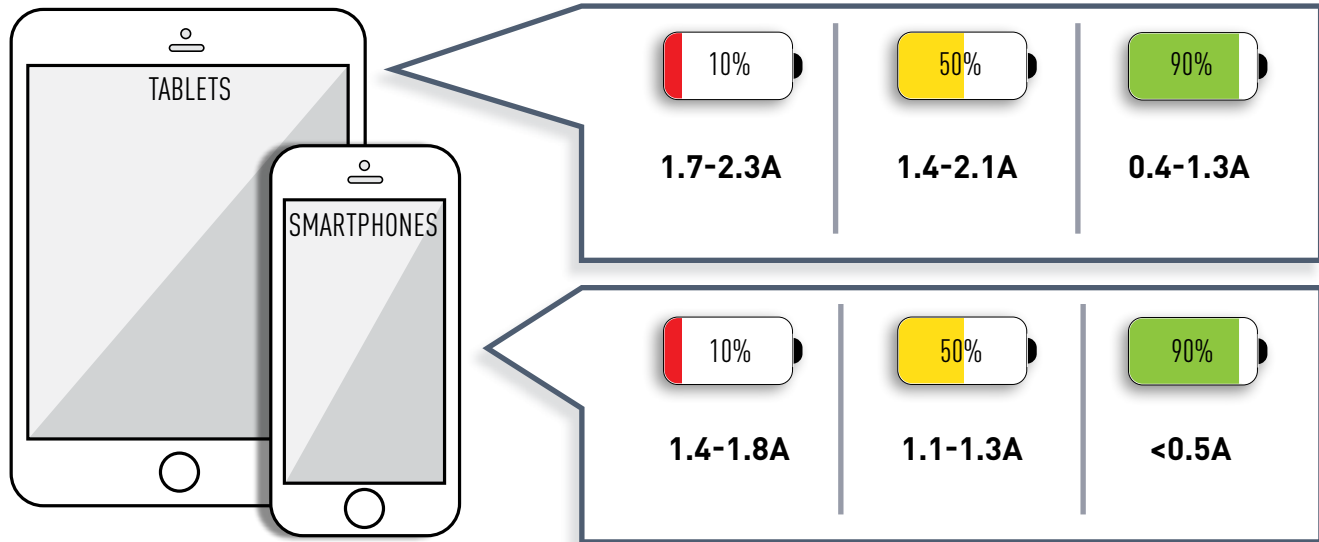
Source

**MORE AMPS IS NOT
NECESSARILY BETTER**

What decision-makers should be asking themselves when spec'ing a project is, "What devices will be charged and how much power will those need?" A restaurant will likely focus on patrons charging smartphones, which need less power than larger devices. An office, on the other hand, will have a mixture of smartphones, tablets and wearables.

WHAT MOBILE DEVICES ACTUALLY NEED TO CHARGE

Legrand has researched how various devices charge, and the results may surprise you. This information could help you decide what USB products are the right fit for your facility. It shows the ranges in current draw of smartphones and tablets tested by Legrand at various stages of battery life.



USB SOLUTIONS

Legrand has a full suite of USB devices for commercial, public and residential customers.

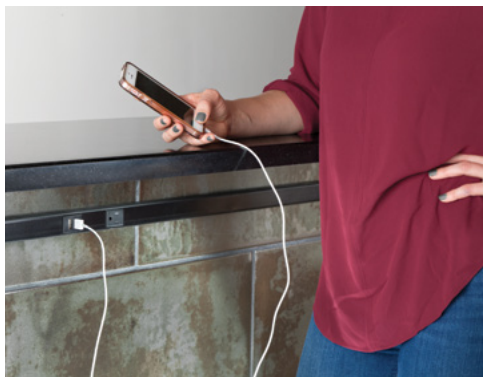
Here's a closer look at three offerings.

USB CHARGING RECEPTACLES



Legrand has a full complement of USB charging receptacles, including 15- and 20-amp options for residential, commercial and hospital settings. For added flexibility, consider PlugTail® USB receptacles. They are easy to install, change out and upgrade, helping facilities stay current with the evolving needs of mobile charging.

PLUGMOLD® MULTIOUTLET SYSTEMS



As mobile devices continue to explode in popularity, so does the need to charge them, often by several people at once. Plugmold multioutlet systems are popular in homes, airport terminals, waiting rooms and even bars — places where it seems like there are never enough outlets. USB Plugmold® products offer dual-port charging modules that share 2.4 amps and allow multiple devices to be charged at once.

OUTDOOR CHARGING STATION



Workplaces, retailers, restaurants and schools are expanding their outdoor offerings to attract workers, customers and students who want to use their mobile devices wherever they go. The Outdoor Charging Station gives them a way to keep people in their outdoor spaces longer by keeping devices powered. The stations include standard power outlets and USB ports and have a National Electrical Manufacturers Association (NEMA) 3R rating for use in all weather conditions.

MOBILE FACTS

The average American consumer between the ages of 16-64 owns

3.64 CONNECTED DEVICES

Source

By 2020, the number of mobile devices worldwide will reach

11.6 BILLION, exceeding the world's projected population of 7.8 billion

Source

The average American charges their cell phone

1.9 TIMES PER DAY

Source



KEVIN KOHL, MBA

Product Manager
Electrical Wiring Systems Division
Legrand, North America

Kevin Kohl holds the position of Product Manager for Legrand North America, responsible for the Commercial Wiring Device segment of the Pass & Seymour product line. He is responsible for many successful products that serve all major commercial vertical markets, including Healthcare, Education, Hospitality, and Commercial Office. Kevin has recognized productivity and mobile charging as key needs in the commercial space today and going forward. He has worked with installers, specifiers, and end users to develop solutions to help meet that need. Kevin has presented in front of a variety of audiences in different forums, including product training for installers, code classes for specifiers, sales planning for distributors, and educational sessions for facility managers. Among other things, Kevin enjoys the excitement that comes from satisfying customers and helping serve unmet market needs.



ABOUT LEGRAND

Legrand is a global specialist in electrical and network infrastructure solutions. Legrand transforms spaces where people live and work and delivers access to power, light and data to millions of spaces around the world.

LET US KNOW HOW WE CAN HELP YOU:

legrand.us/project-help

FIND A DISTRIBUTOR OR REP:

legrand.us/where-to-buy

designed to be better.™

