

CONNECTIVIT

## POWERUP VHILE YOU VORK ALLOWS FOR USB-C POWER

The GracePort<sup>®</sup> USB-C charging functionality allows service technicians and PLC programmers to safely charge their laptops and other handheld devices from outside the door using a USB-C charging cable.

Under OSHA directives and NFPA 70E guidelines, there must be 50 Volts or above for shock hazards to exist in a typical work environment, and voltages operating at below 50 Volts do not require guarding against accidental contact which is required by OSHA under 29 CFR 1910.303(g)(2)(i). Having a 24VDC-powered USB-C charging option eliminates shock hazard risk and gives users a unique ability to transition from their current GFCI protected outlets to a much safer and compact option with minimal wiring complexities.

Additionally, control panel design engineers are constantly working to simplify their designs and increase safety in their control panels. By removing

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120 VAC power through the panel, they can eliminate the risk of both shock and arc flash hazard as per NFPA 70E. With the emerging USB-C standard, laptops and other electronic devices are now able to be quickly charged using a USB-C charging port powered by a 24 VDC connection.

USB CHARGING STATION

24V DC

USB CHARGING STATION 24V DC

USB-A

USB-C

GRACE

P-C2R2-F3RX

ETHERNET

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USB-C connections are quickly becoming an industry standard for transmitting both data and power within a single cable. In the case of our GracePort configurations, we wanted to create a more efficient way of providing power for laptops and other essential devices.



## VERSIONS

- USB-C (C1): The standard C1 component is 60W Max Output 20V at 3 AMPs and is capable of charging most laptops, phones, and other handheld devices.
- USB-C (C2): The C2 component features the same output and functionality as the C1, although it is manufactured to feature a low-profile on the back of the housing, saving space within the cabinet.



## BENEFITS

- Safety: Voltages operating at below 50 Volts do not require guarding against accidental contact which is required by OSHA under 29 CFR 1910.303(g)(2) (i). USB-C components remove the need for GFCI protected outlets on the door.
- **Cost:** USB-C cables are more affordable than laptop chargers, making them much more cost-effective, interchangeable for use, and replaceable.
- **Space Savings:** A smaller alternative housing for power transfer in lieu of a 120V power outlet placed within a larger housing. In addition, the C2 component features a lower profile on the inside of the cabinet.

- Labor Savings: Smaller GracePort® housings with
- fewer components means less installation time. Connections are easily made from an existing 24 VDC auxiliary supply within a panel.



- **Convenience:** Less for engineers and maintenance to carry (i.e. no large laptop chargers).
- **Combine:** Add other components and power options to the mix from our full line of customizable GracePorts (housing sizes may vary).





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