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# Power Distribution Hub Overview

**We're Updating our Documentation!** For the most up-to-date information about the Power Distribution Hub and other ION Control System Devices please check out the following new documentation pages:

- [REV ION Control System](#)
  - [Power Distribution Hub Resources](#)
  - [REVLlib for Power Distribution Hub](#)
- [REV Hardware Client Documentation](#)

The REV Power Distribution Hub (PDH) is the latest evolution in power distribution for the *FIRST* Robotics Competition (FRC). With 20 high-current (40A max) channels, 3 low-current (15A max), and 1 switchable low-current channel, the PDH gives teams more flexibility for overall power delivery. The Power Distribution Hub features toolless latching WAGO terminals, an LED voltage display, and the ability to connect over CAN or USB-C to the REV Hardware Client for real-time telemetry, making it easier than ever to wire and debug your robot.



Power Distribution Hub

## Feature Summary

- 20 High-current channels
  - All supporting up to 40A
  - Supports ATO size breakers and fuses
- 3 Low-current channels
  - Supports up to 15A continuous, 20A peak for approved pneumatic control devices.
  - Supports ATM/APM size breakers and fuses
- 1 Switchable low-current channel
  - On/off control useful for LEDs and other indicators
  - Supports up to 15A continuous
  - Supports ATM/APM size breakers and fuses
- Toolless and color-coded WAGO terminals for all main connections
  - Main power input - latching WAGO 2616 series
  - High-current channels - latching WAGO 2606 series
  - Low-current channels and CAN - push button WAGO 250 series
- Advanced debugging features
  - Channel status LEDs for breaker status and fault feedback
  - LED input voltage display
  - Higher resolution and refresh rate current and voltage monitoring
- CAN connectivity
  - Channel telemetry feedback to main robot controller
  - Configurable CAN termination on device
  - Firmware updating over CAN network
- USB-C connectivity
  - USB-to-CAN device allowing for monitoring and updating devices on the CAN bus
  - Update and diagnose faults with the REV Hardware Client
- ESD protection

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