



Universal Supervisor Charger (USC)



Specifications

| Models | USC 1 | USC 2 | USC 6 |
|--|--|---|--|
| Application | <ul style="list-style-type: none"> Advanced Diagnostic Charger Systems 1, 2, 6 Bay configurations Connectivity and ease of use suitable for Fleet management Support multi-chemistry batteries | | |
| Battery Chemistries | Lithium Based: Li-ion / Li-Polymer, Li-ion Phosphate Nickle Based: NiCd, NiMH | | |
| Battery Capacity Range | 700 mAh to 22,000mAh | | |
| Battery Voltage Range | 3.6V – 14.4V Nominal | | |
| Operating Programs | <ul style="list-style-type: none"> Charge Mode AirShip Mode Storage Mode Calibration Mode (for Smart Batteries) Cycle Mode (for Conventional Batteries) SoH Indication for smart batteries | | |
| State of Charge (SoC) functions (Factory Settings) | <ul style="list-style-type: none"> Air Ship: 30% SoC Storage: 50% SoC | | |
| State of Health (SoH) | Reading only of SMB data and SoH Information | | |
| Charge Profile | Li-ion/Li-poly/LiFePO: Constant Current Constant Voltage, Temperature Limited NiCd/NiMH: Constant Current, Reverse Pulse, Temperature Limited | | |
| Charge Time (Typical) | Radio batteries: <ul style="list-style-type: none"> 2-3 hours 12-16 hours with conditioning (sequence is CHG-DCH-CHG) Laptop batteries: <ul style="list-style-type: none"> 7.5 hours 24-36 hours with conditioning | | |
| Dimensions | L: 9.5"; 250mm W: 4.0"; 110mm H: 2.5"; 70mm | L: 9.5"; 250mm W: 6.5"; 180mm H: 2.5"; 70mm | L: 9.5"; 250mm W: 18"; 480mm H: 3.7"; 95mm |
| Weight | 300g (0.6 lbs.) | 600g (1.25 lbs.) | 3300g (7.0 lbs.) |

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|--|--|---|--|
| Mounting Configuration | <ul style="list-style-type: none"> ▪ Tabletop with integrated anti-slide grips. ▪ Modular mounting plate for various mounting applications | | |
| Front Panel - UI Label with Led Indicators | <ul style="list-style-type: none"> ▪ Power On/Idle (Green) ▪ Charging (White, Flashing) ▪ Calibrating, or Custom SoC Mode (White, Flashing) ▪ Battery Ready, Battery Fully Charge, or Custom SoC Mode Complete(Green, Solid) ▪ Fault (Red, Solid) ▪ Charging on hold due to temp range (Red, Flashing) | | |
| Charging Ports | Barrel connector | Barrel connector | DC Power Input |
| Firmware Update port | USB-C (for firmware update) | | |
| Other Ports | Not available on 1, 2 Bay Device | | Ethernet 10/100MB |
| Power Supply | External Power Supply: 100-240VAC, 50/60Hz | External Power Supply: 100-240VAC, 50/60Hz | Internal Power Supply: 100-240VAC, 50/60Hz |
| | AC Input Protection MIL-STD-704F Voltage/Frequency Transient | | |
| DC Power Input | Input Range 11-33 VDC DC Input Protection MIL-STD-1275D Surge and Spike | | |

Power Management

Current automatically scaled down if power limits are exceeded

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|---|--|---------------|---------------|
| Max Charge/Discharge Current | Charge – 4-5A Discharge – 2A | | |
| Max Charge Power: Low Power SKU (25W per Bay) | Total of 25W | Total of 50W | Total of 150W |
| High Power SKU (50W per Bay) | Total of 50W | Total of 100W | Total of 300W |
| Max Discharge Power (8W Per Bay) | Total of 8W | Total of 16W | Total of 48W |
| Accuracy | +/-1% for charging voltage +/-5% for max charging current | | |

**Connectivity
Options**

USB-C to PC running
CadexLink in
1, 2 Bay Devices

USB-C to PC running
CadexLink in
1, 2 Bay Devices

- Wi-Fi 802.11 b/g/n (up to 150Mbps at 2.4GHz)
- BLE V4.2 (FCC, ISED, CE mark and Bluetooth QDID)
- CadexLink (Operating Application)

**Device Operating
Environment**

Temperature: 0°C to +40°C (32 °F to 104 °F)
Humidity: 10% to 80%

**Device Storage
Environment**

Short-Term (up to 30 days)
Temperature: -40°C to +70°C (-40 °F to 158 °F)
Humidity: Non-condensing

Long-Term (1-3 months +)
Temperature: -40°C to +70°C (-40 °F to 158 °F)
Humidity: Non-condensing

Warranty

Cadex warrants two (2) years against defective materials and workmanship from original purchase date.