



Universal Supervisor Charger (USC)



Specifications

Models	USC 1	USC 2	USC 6
Application	<ul style="list-style-type: none">Advanced Diagnostic Charger Systems1, 2, 6 Bay configurationsConnectivity and ease of use suitable for Fleet managementSupport 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 ModeAirShip ModeStorage ModeCalibration 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% SoCStorage: 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 hours12-16 hours with conditioning (sequence is CHG-DCH-CHG) Laptop batteries: <ul style="list-style-type: none">7.5 hours24-36 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.)

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

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

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- 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

Approvals

UL, CE, RoHS, REACH, RED, WEEE, ISTA 3A, IP44

Warranty

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