



CHARGING THE FUTURE
MADE in USA

AEROSPACE DEVICES INC.

Irvine CA, 92614 USA

(949) 795-2889

Website: <https://aerospacedevice.com>

"2024 USB Charging Plug & Devices Company of the Year"



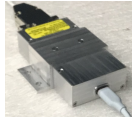
SKYDOCK PRO USB C 100-WATT CHARGING PORT SKD-505-00 SINGLE & SKD-505-01 DUAL

RUGGIDIZED , GO-GREEN, REDUCING E-WASTE HARSH ENVIRONMENT

MILITARY & DEFENSE AIR, LAND & SEA

The SkyDock Pro Single USB C Chargers, are capable of providing up to 100W per port to meet today's challenging Advanced Power charging demands, Output voltage is negotiated (Protocol) by the device to be charged. The supported voltage outputs are 5, 9, 15, & 20VDC, each port can provide up to 100W of power to meet Next-Gen Devices challenging charging demands, Our SKD-505-00 & -01 USB-C Charger's that can provide 100W with the Highest Performance, 93% Efficiency, and offer the lowest installed cost, **Go-Green**, Contributing to Reducing E-Waste and to empower consumers to make more sustainable choices contributing towards reducing up to 22 million pounds of e-waste each year.

STARLINK POWER CHARGER WITH MINI USB C TO DC CHARGING CABLE



Aerospace & Defense Review Annual Award for USB Port Chargers Design & Manufactures: "2024 USB Charging Plug & Devices Company of the Year"!



CERTIFICATIONS AND APPROVALS:

QTP, UUT & QTR
ISO9001 Certification, AS9100 Manufacturing Facility.
Installation Manuals

OEM APPROVED MANUFACTURE:

Bombardier / Lear Aircraft: Approved Manufacture
Embraer S.A: Approved Manufacture,
Dassault Falcon Jet: SKD - FJ Approved and installed on Mfg. Airframes.

SINGLE PORT

SKYDOCK PRO USB C 100-WATT SINGLE PORT SKD-505-00.
SKD-505-00: Aviation's First & Only 12VDC - 32VDC Input power USB C 100-Watts.
Part Name: SkyDock Pro Single (SKD-505-00).
Part (Order) Number: 909-2010-001
Design Data: 909-2010-000
Letter of Assist: SUPPORTING DATA PARTS MANUFACTURING APPROVAL,
Certification may be used as part of the application for PMA.
STC Approval and Design Data STC: SA13-50
A/C Installation: Embraer ERJ170-200

DUAL PORT

SKYDOCK PRO USB C 100-WATT DUAL PORT SKD-505-01.
PRICE PER PART: \$425.00 EA.
SKD-505-01: Aviation's First & Only 12VDC - 32VDC Input power USB C 100-Watts.
Part Name: SkyDock Pro Dual (SKD-505-01)
Part (Order) Number: 909-2010-002
Design Data: 909-2010-000
Letter of Assist: SUPPORTING DATA PARTS MANUFACTURING APPROVAL,
Certification may be used as part of the application for PMA.
STC Approval and Design Data STC: SA13-50
A/C Installation: Embraer ERJ170-200

- Features:**
- SkyDock Pro Universal & In-Seat Mounting included
- Certified for Fixed Wing, Flight Deck & Rotor-craft.
- Efficiency 93%
- USB-C QC 3.0/4.0 Compatible.
- Integrated 24V DC Protection on Protected HVD+, HVD-, HVCC1, HVCC2 Outputs
- Over Voltage Input Protection
- Under Voltage Input Protection
- Over Current Voltage Output Protection
- Resettable Fuse Input Protection
- 5V Default Output for Non-Quick Charge Compatible Devices
- Over Temperature Shutdown
- Static Protection
- Input Spike Protection
- Dual Output Connectors USB-C and USB-A
- Input Voltage Range of 5VDC-34VDC 5 AMP In-Rush
- Input Current Range of 50mA Standby to 1.8A max
- USB-C Output Voltage Ranges 5V/3A, 9V/3A, 12V/2.5A
- Output Power Max 100 Watts USB-C
- Max Power 100W
- Peak Efficiency: 92% to 93
- Single Size: 1.770 W X 0.825 H X 3.85 L
- Weight: 5.0 oz (Estimated Weight)
- Dual Size: 1.95 W X 1.29 H X 3.85 L
- Weight: 6.8 oz (Estimated Weight With Universal Bracket)
- Environmental:
- Temperature Range: Operating -40C to +105C
- Decompression: 50,000ft High Humidity Operational Environment
- Stress Tested to 20g acceleration & 11m Sec 6g acceleration curve
- DO160G QTP & QTR available upon request.
- Charge one or two devices simultaneously at maximum power
- Thermal Shutdown Temperature & Thermal Shutdown Hysteresis
- Input Current Limit Threshold & Output Runaway Limit Threshold, CS Negative Limit Threshold
- Output Over-current Detection Threshold & Output DC Current Shutdown Detection Threshold

CONTACT INFO:

Aerospace Devices Inc.

Irvine, Ca.

Phone: +01 (949) 795-2889

Email: rpecanic@aerospacedevicesinc.com

Website: <https://aerospacedevice.com>

CONNECTOR & BACKSHELL ORDER

Mfg. Nor Comp Inc. Series: 680S Series |
Input Power Connector PN#
680S5W5203L201

Mfg. Nor Comp Inc. Series: 680S Series | Connector Back shell: PN#
979-015-030R121





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SKD-505-00 SINGLE & SKD-505-01 DUAL SKYDOCK PRO USB C 100-WATT CHARGING PORT



Ruggedize Design , **GO-GREEN, REDUCING E-WASTE** Harsh environment
CONTINUED SPECIFICATIONS, DATA, FEATURES

MILITARY & DEFENSE AIR, LAND & SEA



- Reduced inrush current with Soft-Start and output is not engaged until unit starts-up. Input filtering also reduces inrush current. Safe dissipation of inrush energy
- Self-protected from transient voltages exceeding these limits in circuit under normal operation.
- Efficiency 93%
- Input Voltage (allows operation in on / off conditions. 14 VDC-34 VDC 5 AMP most efficient input power is 28VDC.
- Common USB-PD VBUS voltage outputs up to 5.0A when in 20V mode & 3A in other output voltage configurations
- EMI interference avoidance and Input Power Conditioning
- Forced-PWN at Light or No-Load conditions for reduced EMI through USB cable.
- Board Layout Design and Enclosure Design reduces EMI.
- Only one port per controller no syncing.
- Thermal Shutdown
- Integrated USB-PD VBUS Features Over-Current Protection Limits
- Under-Voltage Protection Limit, VBUS Over-Voltage Protection Limits, Digital Voltage Scaling (DVS) for smooth, predictable voltage transitions
- Integrated USB VBUS Discharge, Watchdog timer for guaranteed safe operation, Output Voltage Adjustment for Cable Voltage Drop on Captive-Cable Applications
- Devices provide a single-port Type-C compliant USB Power Delivery PHY for an external TCPM.
- Type-C, USB-PD and TCPC specifications.
- USB Type-C Revision 1.3
- USB Power Delivery Revision 2.0, and Revision 3.0 Version 1.2
- USB Inter-Block Specification Revision 2.0 Version 1.1
- Implements Type-C Configuration Channel (CC) interface and USB-PD Physical layer functions to a Type-C Port Manager (TCPM) that handles PD Policy management.
- Type-C Cable plug orientation detection
- Type-C Detection supporting default, 1.5A or 3.0A current capabilities.
- SAR ADC for VBUS Voltage Monitoring
- Integrated Over-Current Protection common voltage rail in the application.
- Integrated Protection for Cable Shield-Short-to-Battery faults preventing cable, passenger, and device damage.
- Fast detection of cable shield over-current
- Fast turn-off of external protection switch
- Supports USB BC1.2 Charging Downstream Port (CDP) Dedicated Charging Port (DCP), and High-Speed Pass through Modes
- 100W USB-PD Controller and Protector, USB D+/D- Protection and Host Charger Emulator
- Integrated HVDP/HVDM Apple® and Samsung® Charge Detection Termination Resistors
- Compatible with USB On-The-Go Specification, Oppo® and OnePlus® devices. Apple® Mafi R33 Over-current Compatible
- Integrated Robust High-Voltage Protection for the USB-PD or TCPM controller from events at the receptacle or captive cable:
- Automatic Fault Detection and Retry, Short-to-Battery and Short-to-Bus
- ESD Protection on USB HVD+, HVD-, HVCC1, HVCC2 and SHLD_SNS pins
- Short circuit, power surges, overload and over temperature

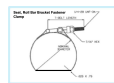
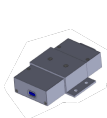
MOUNTING AND BRACKET

OPTIONS:

Pricing includes Universal or Straight Bracket, We offer options for Custom Mounting Brackets, Face Plate Covers, bezels, as well as plating & surface finishing. Our In- house design team can supply 3D Printed Models to save time and reduce costs.

CERTIFICATIONS AND APPROVALS:

Design Data
Model Eligibility
Letter of Assist, Support Engineering Data for Airborne Parts Manufacturing Approval.
QTP, UUT & QTR
ISO9001 Certification, AS9100 Manufacturing Facility.
Installation Manuals



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