



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"



## OFF-ROAD, SEARCH & RESCUE RUGGEDIZED, HARSH ENVIRONMENT SKYDOCK PRO USB C 100-WATT CHARGING PORT



### SKD-505-00 SINGLE & SKD-505-01 DUAL

12VDC Min. to 32VDC Max.

**RUGGEDIZED DESIGN , GO-GREEN, REDUCING E-WASTE HARSH ENVIRONMENT**

The SkyDock Pro Single USB C Chargers, are capable of providing up to 100W per port to meet today's challenging charging demands, The SkyDock Pro USB Type C Chargers, capable of providing up to 100W, with a maximum of 5A @20VDC. The output voltage is Negotiated by the device to be charged, the supported voltage outputs are 5, 9, 15, & 20VDC. 100-Watts of power to meet Advanced Charging Power demands with Superior Performance, Highest Efficiency, Fast & Save APD.

Contributing towards **Reducing E-Waste**, empower consumers to make more sustainable choices, contribute to preventing up to 22 million pounds of e-waste each year.

### Universal & Roll Bar Mounting Brackets



Aerospace & Defense Review Annual Award for USB Port Chargers Design & Manufactures:

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



**Industry & Gov. Testing is Great, Our #1 Test is to  
Pass Your Requirements or Abuse!**

### MOUNTING AND BRACKET OPTIONS:

**Pricing includes Universal or Straight Bracket.** We offer

Under Seat / Roll Bar Mounts 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  
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**

**PART DISCRIPTION : SKD-505-00 SINGLE REV.F**

**O RDER PN: 201-0003-C100 Rev. F**

### **DUAL PORT**

**PART DISCRIPTION : SKD-505-01 DUAL REV.F**

**ORDER PN: 201-0003-C200 Rev. F**

**"Universal Mounting Bracket Included for Both Single & Dual"**

**"Roll-Bar / In-Seat Mounting Bracket Sold Separately" Part # SKD-505-55**

**"INPUT POWER MATING CONNECTOR & BACKSHELL ORDER ONE EA. PER  
SINGLE OR DUAL PORT"**

**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**



CONTACT INFO:

**Aerospace Devices Inc.**

Irvine, Ca.

Phone: +01 (949) 795-2889

Email: [rpecanic@aerospacedevicesinc.com](mailto:rpecanic@aerospacedevicesinc.com)

Website: <https://aerospacedevice.com>



- **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/25
- 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



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"

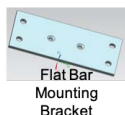


**Ruggedized Design , GO-GREEN, REDUCING E-WASTE Harsh Environment**

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

### SPECIFICATIONS , DATA, FEATURES, BENEFITS.

- "Integrated legacy USB" solutions that allow older USB devices to work with modern system
- 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



Flat Bar  
Mounting  
Bracket



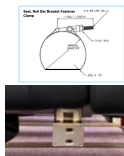
Universal  
Mounting  
Bracket



Roll Bar Mount



Under Seat  
Bracket Mount



### MOUNTING AND BRACKET OPTIONS:

Pricing includes Universal or Straight Bracket. Roll Bar Mount Sold Separately. 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.

Universal or Flat Bar Mounting Bracket Included for Both Single & Dual

Roll-Bar / In-Seat Mounting Bracket Same Part for both Models. Sold Separately  
Part # SKD-505-55

Not Included: INPUT POWER MATING CONNECTOR & BACKSHELL  
ORDER ONE EA. PER SINGLE OR DUAL PORT:

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

Nor Comp Inc. Series: 680S / Back Shell: PN# "979-015-030R121"

### CONTACT INFO:

**Aerospace Devices Inc.**

Irvine, Ca.

Phone: +01 (949) 795-2889

Email: [rpecanic@aerospacedevicesinc.com](mailto:rpecanic@aerospacedevicesinc.com) Website:

<https://aerospacedevice.com>