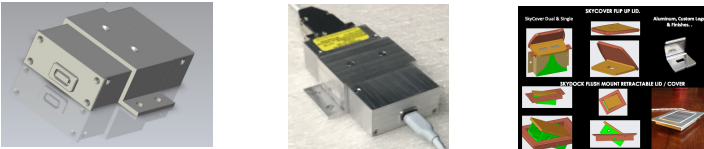




The SkyDock Pro Single USB C Chargers can provide up to 100W per port to meet today's challenging charging demands. The Output voltage is determined by the combination of this charger and the device to be charged. The SkyDock Pro USB C was designed to meet the highest performance standards, while maintaining industry leading efficiency, and offering the lowest installed cost.

The SkyDock Pro comes pre-configured as a USB-C 100-Watt Charger with the following profiles:



Features:

- SkyDock Pro Universal Mounting options.
- Certified for Fixed Wing, Flight Deck & Rotorcraft.
- 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/2.5
- Output Power Max 100 Watts USB-C
- Output Power Max 12 Watts USB-A
- Max Power 100W
- Peak Efficiency: 90% to-93%
- Size: 1.970 W X 0.825 H X 3.85 L
- Weight: 5.7 oz (Estimated Weight)
- Environmental:
- Temperature Range: Operating -40C to +105C.
- Decompression: 50,000ft High Humidity Operational Environment: 95%
- Stress Tested to 20g acceleration & 11m Sec 6g acceleration. curve
- DO160G QTP & QTR's available upon request.

Ordering Information:

SKD-505-00 REV. F

CONTACTINFO:

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E-mail: info@ptxdefense.com

Specifications, Performance, & Benefits:

- Integrated Legacy USB 2.0 Charging Support including BC1.2, Apple CarPlay, MFi R33, and OTG Integrated ESD Protection.
- 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 opera [on 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-PWM 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 Limits
- VBUS Over-Voltage Protection Limits
- Digital Voltage Scaling (DVS) for smooth, predictable voltage transitions
- Integrated USB VBUS Discharge
- Integrated Watchdog timer for guaranteed safe operation.
- Integrated 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.
- Designed to comply with 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
- Compatible with 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:
- Apple® Mafi R33 Over-current Compatible
- Automatic Fault Detection and Retry
- Short-to-Battery and Short-to-Bus Protection
- ESD Protection on USB HVD+, HVD-, HVCC1, HVCC2 and SHLD_SNS pins
- Short circuit, power surges, overload and over temperature
- 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