



## RUGGED USB 3.0 HUB

*Military-Grade, Environmentally Sealed, Electromagnetically Shielded, Mountable*

The Parraid Rugged USB 3.0 Hub is the toughest four port hub on the market. Designed from the ground-up for the most extreme operating environments encountered by modern advanced mobile IT systems, the Rugged USB 3.0 Hub is certified to **MIL-STD-810F** for temperature, vibration, and pyroshock; **MIL-STD-461E** for emissions and susceptibility. The sturdy and dependable Rugged USB 3.0 Hub is the strongest way to interconnect your deployable systems and is fast and reliable under the harshest conditions.

*Don't let your USB hub be the weakest link in your fielded IT equipment!*

### BENEFITS & HIGHLIGHTS

- ▶ Slim, durable design
- ▶ Retentive connectors
- ▶ Heavy-duty military connectors prevent accidental disconnection
- ▶ Withstands extreme temperatures
- ▶ Withstands extreme shock
- ▶ Electromagnetically shielded
- ▶ Built-in mount points
- ▶ Port overcurrent protection
- ▶ Four powered SuperSeed USB 3.0 Ports
  - High-speed data transfers up to 5Gbps
  - Up to 900 mA per downstream port
  - Fully backwards compatible with USB predecessors
- ▶ Can cascade multiple hubs, enabling many devices
- ▶ Operates with Microsoft® Windows, Apple® Macintosh OS, Linux, and other USB-capable operating systems



General	
Dimensions	7.52" x 2.37" x 1.8"
Weight	1.22 lbs.
Finish	Black anodized (MIL-A-8625, Type II)
Ports	(4) Downstream USB ports, (1) Upstream USB port, and (1) Power
Power Cable Connector	ODU S10YAR-P03XJG0-0000
Upstream Cable Connector	ODU A10WBM-P12XMM0
Downstream Cable Connector	ODU A10WCM-P12XMM0
Port Speed	Super, high, full, or low-speed device connections and super or high-speed host connection
Power	
Power Source	Self-powered with external supply
Consumption	19 watts with full power to all downstream devices
Self-Power Input Voltage	18-36 VDC @ 1A
Output (Downstream)	5VDC at 900mA per port with overcurrent protection
Environmental	
Operating Temperature	Minimum -40°C to Maximum +70°C
Storage Temperature	Minimum -55°C to Maximum +85°C
Cooling	Conduction/convection via case
Addition Certifications	Vibration and pyroshock
EMC/EMI Certifications	Emissions and susceptibility
USB Certification	USB 3.1 Gen 1 SuperSpeed 5Gb/sec and USB 2.0



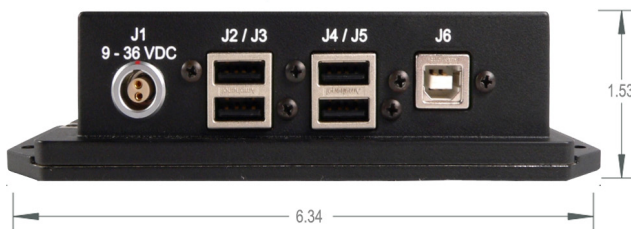
## RUGGED USB 2.0 HUB

*Military-Grade, Environmentally Sealed, Electromagnetically Shielded, Mountable*

The Parraid Rugged USB 2.0 Hub is the first USB hub designed to meet a full range of environmental requirements for mobile and deployed systems. It has been tested to **MIL-STD-810F** for shock, vibration, temperature, sand, and dust. The Rugged USB Hub has also been tested to **MIL-STD-461E** for conducted and radiated emissions and susceptibility.

With the ability to be mounted and deployed in a number of environments, the Rugged USB 2.0 Hub is one of the most versatile rugged peripherals in your IT arsenal.

### BENEFITS & HIGHLIGHTS



- ▶ Environmentally sealed USB, serial, and power ports
- ▶ 4 powered high speed USB 2.0 ports
  - Up to 480 Mbps
  - Up to 500 mA
- ▶ 2 x RS232 serial ports for legacy and serial devices
  - Point to point communication
  - 50 ft.
  - 20Kb/s
- ▶ 1 x RS422 serial port for greater distances and higher baud rates than RS232
  - Point-to-multipoint communication
  - Up to 10 receivers
  - 4000 ft.
  - 100kb/s
- ▶ 9-36 VDC power input
- ▶ Less than 2 lbs. total weight

General	
Dimensions	6.34" x 1.53" x 3"
Weight	23 oz
Finish	Gold iridite and black powder coated surface
Ports	(4) Downstream USB 2.0, (1) Upstream USB, (1) RS232 and (1) RS422
Power Cable Connector	Lemo FGG.1B.302.CLAD52
Upstream Cable Connector	Type B USB
Downstream Cable Connector	Type A USB
Port Speed	High, full, or low-speed device connections and high-speed host connection
Power	
Power Source	Self-powered with external supply
Consumption	16 watts
Self-Power Input Voltage	9-36 VDC power input
Output (Downstream)	5VDC at 500mA per USB Port
Environmental	
Operating Temperature	-55°C to 49°C (-67°F to 120°F)
Storage Temperature	-58°C to 85°C (-72°F to 185°F)
Cooling	Conduction/convection via case
Addition Certifications	MIL-STD-810F for Temperature, Sand/Dust, Shock, and Vibration
EMC/EMI Certifications	MIL-STD-461E for CS101, CS114, & RS103. FCC CFR Part 15 Subpart B
USB Certification	USB 2.0