MILTECH™ VGA

Military Rugged USB3 to VGA & Serial Converter

PRODUCT DESCRIPTION

Modern warfare requires interconnectivity between dozens of serial and VGA devices to the new computerized network.

Data and information transferring between different platforms in battlefield and command centers is necessary for modern warfare. Transferring tactical information to devices such as navigation systems, cameras, smart suits and many more, becomes a vital necessity for mission success.

The MILTECH VGA is a rugged USB 2/3 to VGA and Serial Converter enables to connect a USB device (such as laptop, desktop) with a VGA or Serial RS232/422/485/ LVTTL device. It also provides 6V/8V power output which eliminates the need for power adapter.

It is a multi-monitor solution, extending working space with split-screen, mirroring display, etc.

Developed for harsh environments, the MILTECH VGA features mechanical packaging enhancements designed for MIL-STD-810G airborne and ground environmental compliance and high reliability. The unit has been especially hardened to improve ingress, impact, and shock/vibration protection, as well as eliminate all moving parts through passive cooling.

With the best combination of size, weight, power and cost (SWaP-C) in the industry, it saves valuable real estate for computers, sensors, targeting systems, and other devices.

SPECIFICATIONS

PHYSICAL PORTS	• 1 x USB2.0/3.0 uplink • 1 x VGA output • 1 x Serial interface RS232/422/485/LVTTL • 1 x 6V/8V power output
CONNECTORS	• J1: GK0WAM-P12UM00-000L (USB uplink) • J2: GK1WBM-P27UB00-000L (VGA, Serial, Power)

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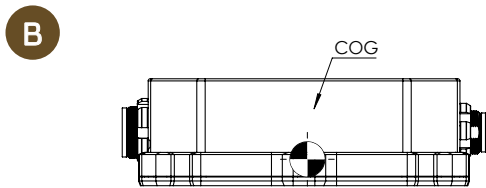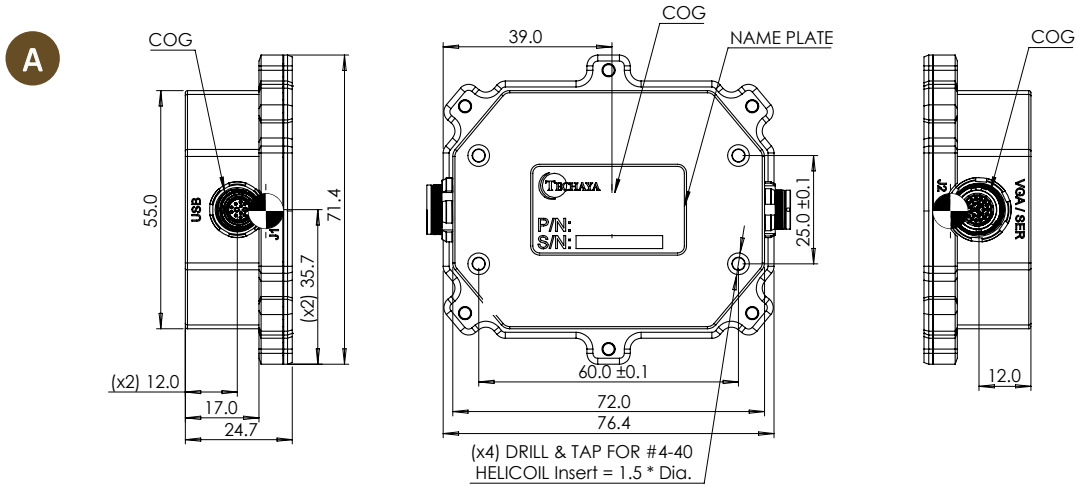## Military Rugged USB3 to VGA & Serial Converter

SPECIFICATIONS

CHASSIS	• Low profile rugged machined aluminum • Conductively cooled • Ingress protection against sand, dust and moisture • Anodize Coating, MIL-A-8625, Type II, Class 2
STANDARDS	• MIL-STD-461G, MIL-STD-810G, IP68

PERFORMANCE	• 1 Upstream signal - USB2.0/USB 3.0
	• RS232, RS422, RS485, TTL signals
	• Power output 6V/8V, 2A
	• VGA output resolution:
	  - USB3.0 (SS) up to 1920 x 1200 @60Hz
	  - USB2.0 (HS) up to 800 x 600 @60Hz

STANDARDS COMPLIANCE	• USB (SS) specification: data rate up to 5 Gbps • USB HS specification: data to 480 Mbps
POWER	• Power input: 5Vdc +/- 5%, 0.5A min • Power output: 6Vdc/8Vdc @2A (requires additional current input) • Power Consumption: 2.5W Max
ELECTROMAGNETIC	• Design to meet MIL-STD-461G Electromagnetic compatibility

ENVIRONMENTAL	• Design to meet MIL-STD-810G:
	  • Random vibration (514.6I), Bench Handling (516.6VI)
	  • Air Pressure (500.5I,II), Blowing Rain (506.5I), Immersion (512.5I)
	  • High Temp.(501.5I,II), Low Temp.(502.5I), Humidity (507.5II),
	  • Salt Atmosphere (509.5I), Blowing Dust (510.5I), Loose Cargo Vibration (514.6II)
	  • Wind Analysis
	  • IP68

PHYSICAL	• Dimensions: 76.4mm (L) x 71.4(W) x 24.7(H), not including connectors • Dimentions: 3''(L) x 2.8''(W) x 0.97''(H), not including connectors • Weight: 135g
INSTALLATION	• Set of four 4-40 threads for mounting to any flat surface.
COOLING	• No Moving Parts. Passive Cooling.
TEMPERATURE	• Operational: -40°C to +85°C (-40°F to +185°F) Cold Start • Storage: -40°C to +85°C (-40°F to +185°F)

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A

COG · COG · NAME PLATE · COG

39.0
55.0
71.4
(x2) 35.7
USB
J1
(x2) 12.0
17.0
24.7
Techaya
P/N:
S/N:
25.0 ±0.1
J2
VGA/SER
COG
60.0 ±0.1
72.0
76.4
12.0
(x4) DRILL & TAP FOR #4-40
HELICOIL Insert = 1.5 * Dia.

B

COG

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
1-VGA-000	Military Rugged USB2/3 to VGA and Serial Converter
2-CBL303USBUP	USB Upstream Harness for MILTECH 303/MILTECH VGA
2-CBLVGA002	VGA/Serial harness for MILTECH VGA