

MILTECH™ 2024

Military Ethernet to Multiple Serial and IO Unit

The MILTECH™ 2024 is a MIL-STD rugged, military grade Ethernet to Serial/IO Terminal Server. Developed for portable military and harsh environment applications, the MILTECH 2024 features mechanical packaging enhancements designed for MIL-STD-810F 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. Interface through sealed MIL-STD circular connectors, with a 24VDC power makes it instantly compatible with network device and power systems. Compact in size, the MILTECH 2024 is particularly useful for expanding Serial port density, GPIO, in space-constrained airborne and ground vehicle environments while providing new security layer for serial interfaces.

MILTECH 2024 serves as a robust commercial off the-shelf (COTS) solution for rugged Serial, GPIO connectivity, which can be used in a wide range of military and commercial applications, including:

- UAVs
- Land autonomous vehicles (UGVs)
- Robots
- Mobile equipment fielded in harsh environments

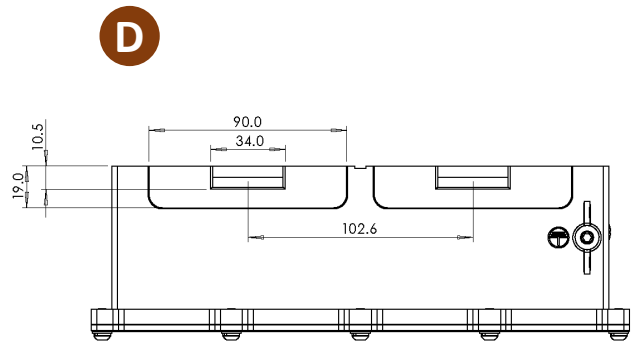
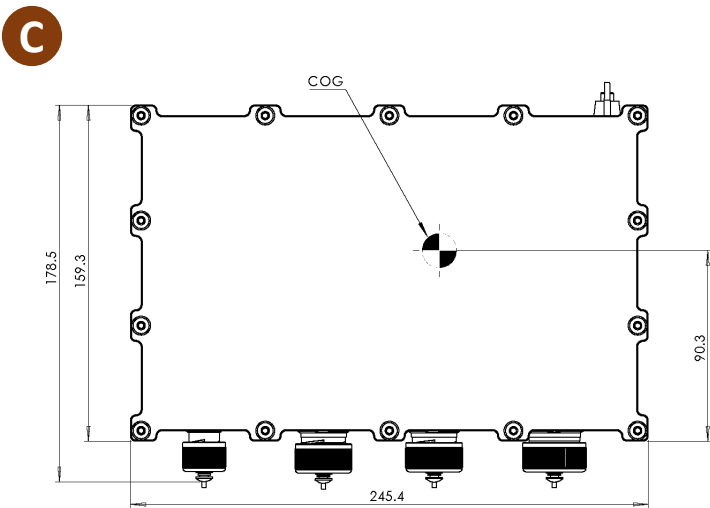
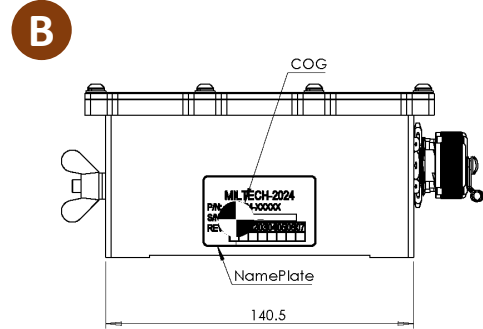
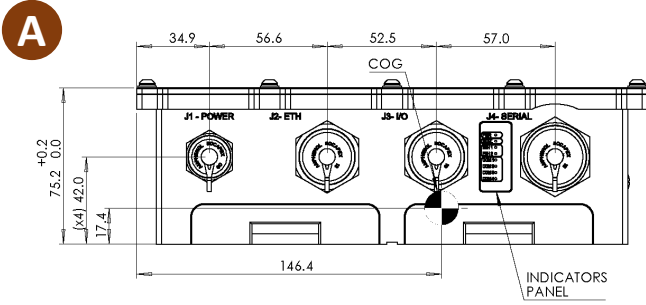
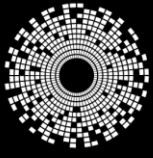
Modern platforms contain dozens of legacy serial devices that must be interconnected to the new computerized network. The MILTECH 2024 is an ideal solution for secure mobile Serial-equipped platforms. With the best combination of size, weight, power and cost (SWaP-C) in the industry, it saves valuable real estate for computers, sensors, targeting systems, and other devices that make mobile platforms highly effective.





SPECIFICATIONS

PHYSICAL PORTS:	<ul style="list-style-type: none"> • 4 x RS422 or 4 x RS232 (including RTS, CTS) • 2 x 10/100/1000Base-T Ethernet Copper Ports (optional additional Fiber port, see ordering information) • 6 x Open / Ground GPO and 6 x Open / Ground GPI • 2 x Open / Power GPO and 2 x Open / Power GPI • 1 x RS232 for Management Interface
CONNECTORS:	<ul style="list-style-type: none"> • J1 Power: D38999/ 24WA35PN • J2 ETH: D38999/ 24WC35SN • J3 I/O: D38999/ 24WC35SA • J4 Serial: D38999/ 24WD35SN
CHASSIS:	<ul style="list-style-type: none"> • Low profile rugged machined aluminum • Conductively cooled • Ingress protection against sand, dust and moisture • Anodize Coating, MIL-A-8625, Type II, Class 2
LED INDICATION:	<ul style="list-style-type: none"> • Per port LED indications: RS232/422/485 - TX, RX, ETH, FIBER
POWER:	<ul style="list-style-type: none"> • Power Input: 24VDC Nominal (12-48V), LED Indication • Power Consumption: 7W Max • Chassis grounding • MILSTD-1275, MILSTD-704
ELECTROMAGNETIC/ENVIRONMENTAL:	<p>Designed to Meet:</p> <ul style="list-style-type: none"> • MIL-STD-461E Electromagnetic compatibility • MILSTD-810F/G/GM: <ul style="list-style-type: none"> ○ Random vibration (514.5I), 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 • IP67
PHYSICAL:	<ul style="list-style-type: none"> • Dimensions: 245.4mm(L) x 159.3mm(W) x 75.2mm(H), not including connectors • Dimensions: 9.66"(L) x 6.27"(W) x 2.96"(H), not including connectors • Weight: 390g
COOLING:	<ul style="list-style-type: none"> • No Moving Parts. Passive Cooling.
TEMPERATURE:	<ul style="list-style-type: none"> • Operational: -40°C to +85°C (-40°F to +185°F) Cold Start • Storage: -45°C to +85°C (-49°F to +185°F)



ORDERING INFORMATION

PART NUMBER	DESCRIPTION
1-2024-000	Ethernet to 4 Serial Terminal Server + 8 x GPIO, RS422/RS232, No F/O
1-2024-001*	Ethernet to 4 Serial Terminal Server + 8 x GPIO, RS422/232, 1 x F/O port
2-CBL2024PWR	MT2024 J1 - Power Cable
2-CBL2024LANMNG	MT2024 J2 - LAN and MANAGE
2-CBL2024IO	MT2024 J3 - DISCRETE IO
2-CBL2024SERIAL	MT2024 J4 - RS422 SERIAL
2-CBL2024PLUG232	MT2024 J4 - RS232 PLUG

* Optional configuration, contact factory