

DuraNET 1059

Rugged 5-Port 10/100 Ethernet Switch, Unmanaged

- **Plug and Play Unmanaged Device**
- **5 Unmanaged Fast Ethernet Switch Ports**
- **Tested to MIL-STD-810F**
- **Power Consumption: <8W**
- **Weight: 1.9lbs (0.86 kg)**
- **Operating Temperature: -40°C to +85°C**



FEATURES

ETHERNET PORTS

- Five Auto-Detecting 10/100BaseT Ethernet Ports
- Auto-MDI/MDIX Crossover 100BaseTX/10BaseT
- Auto-Sensing of Full or Half Duplex on Each Port
- Auto-Negotiation Between 10BaseT & 100BaseT
- Any Port Can Serve as Uplink for Network Expansion

SWITCHING

- Pause frame-based non-blocking switch fabric
- Five fully independent media access controllers
- Integrated 512 Kb frame buffer memory
- 1,024 MAC address look-up engine
- Store-and-forward switching

MANAGEMENT

- Unmanaged Switch; No Configuration Required

MECHANICAL

- Compact Metal Enclosure
- Conductively Cooled to Outer Case
- Ingress Protection from Sand, Dust, Moisture
- Anodized Coating for Durability
- Connectors: MIL-C-38999 (Ethernet, Power)

MIL-GRADE

- Qualified to Meet MIL-STD-810F Environmental (Shock, Vibration, Temperature)

POWER

- Vehicle Grade DC/DC Converter
- Voltage/Surge Protection and EMI Filtering
- MIL-STD-704E Compliant

The DuraNET® 1059 is a rugged unmanaged Ethernet switch node designed to provide local area network (LAN) connectivity to IP-enabled computers and other net-centric devices. Weighing in at less than 2lbs and hardened with a black anodize finish, internal heatsinking and MIL-38999 connectors, this enclosed Fast Ethernet switch unit serves as a highly reliable, compact solution for expanding port density to DuraMAR mobile routers and other netcentric solutions.

Featuring five IEEE 802.3/u compliant (10/100mpbs) Ethernet transceiver ports and support for auto-MDI-MDIX network installation, the robust DuraNET 1059 requires no configuration and is designed for simple plug-and-play operation. Any of its five transceiver ports are flexibly designed to serve as an uplink. Support for auto-crossover, auto-polarity, auto-negotiation, and bridge loop prevention are all integrated.

The DuraNET 1059's galvanically isolated power supply and Ethernet switch components support operation from -40°C to +85°C, as well as tolerance to MIL-STD-810F shock and vibration profiles experienced by helicopter and fixed wing aircraft. Its miniature form factor, low power consumption, and lightweight chassis make the DuraNET 1059 an ideal Commercial-Off-the-Shelf (COTS) solution for unmanned/manned airborne or ground vehicle networking applications.

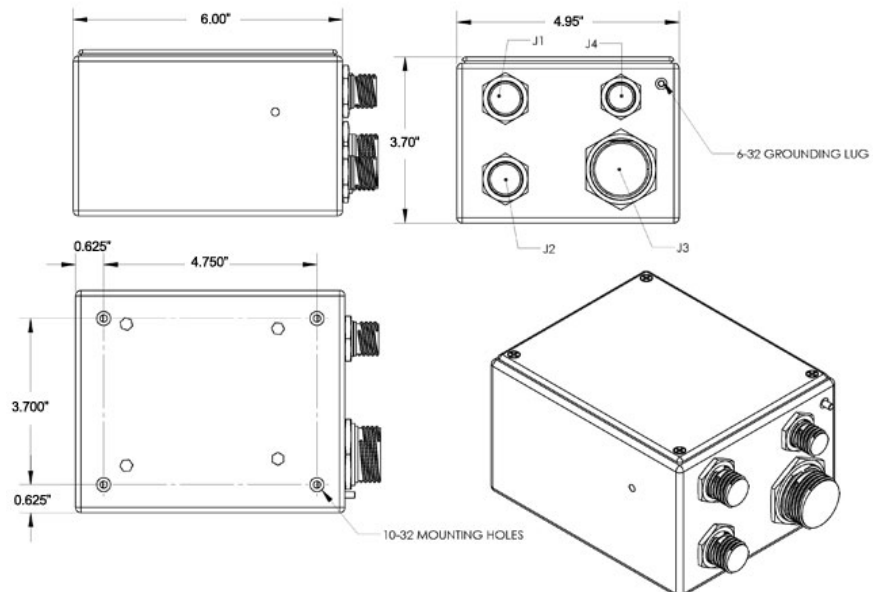
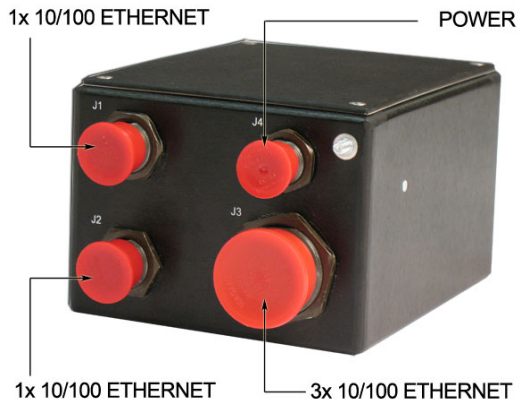
DuraNET 1059

Specifications



Optional Starter Breakout Cableset

DATA TRANSFER	10 Mbits/sec or 100 Mbits/sec, Full Duplex or Half Duplex Mode
COMPLIANCE	<ul style="list-style-type: none"> • IEEE 802.3 10 Mbps 10BASE-T (Ethernet) • IEEE 802.3u 100BASE-TX 100 Mbps (Fast Ethernet) • IPv4 and IPv6 Traffic Compatible
POWER	<ul style="list-style-type: none"> • Voltage Input: 24V Nominal (18-36V range) • Power Consumption: Estimated at <8W • MIL-STD-704E Compliance • Ground: 6-32 Grounding Lug for Connection to System Chassis Ground • Isolation: Galvanically Isolated Power Supply
PHYSICAL	<ul style="list-style-type: none"> • Dimensions (LxWxH): 6.00" (152.4mm) x 4.95" (125.73) x 3.70" (93.98mm), Excluding Connectors • Weight: 1.9lbs (0.86 kg) • Installation: Four 10-32 Mounting Holes Underneath • Chassis: Aluminum Alloy 6061-6063, Corrosion Resistant • Finish: Black Anodize (MIL-A-8625, Type II, Class 2)
TEMPERATURE	<ul style="list-style-type: none"> • Tested to MIL-STD-810F: • Operating: -40°C to +85°C (-40°F to +185°F) • Non-Operating: -40°C to +85°C (-40°F to +185°F) • Cooling: Passive Conductive. No Moving Parts.
SHOCK/VIBRATION	<ul style="list-style-type: none"> • Tested to MIL-STD-810F (Jet & Helicopter Test Profiles) • Operating Shock: 15g, 11ms, ½ Sine Wave, 3 Pos/3 Neg Pulses per Axis, Total 18 • Random Vibration: 0.022-G²/10-Hz to 0.0026-G²/2000-Hz
HUMIDITY	<ul style="list-style-type: none"> • Designed to Meet MIL-STD-810F • Up to 95%, Non-Condensing
MTBF	<ul style="list-style-type: none"> • Calculated per MIL-HDBK-217F: • 238,663 hours or 27.2 years (@25°C Ground Benign) • 149,903 hours or 17.1 years (@40°C Ground Benign)
ACCESSORIES	CBL-1537-01 - Starter cableset w/mating MIL-C-38999 connectors to RJ-45 & Power, 5-foot length
WARRANTY	1 Year RTF Warranty (Extended Service Contracts Available)



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