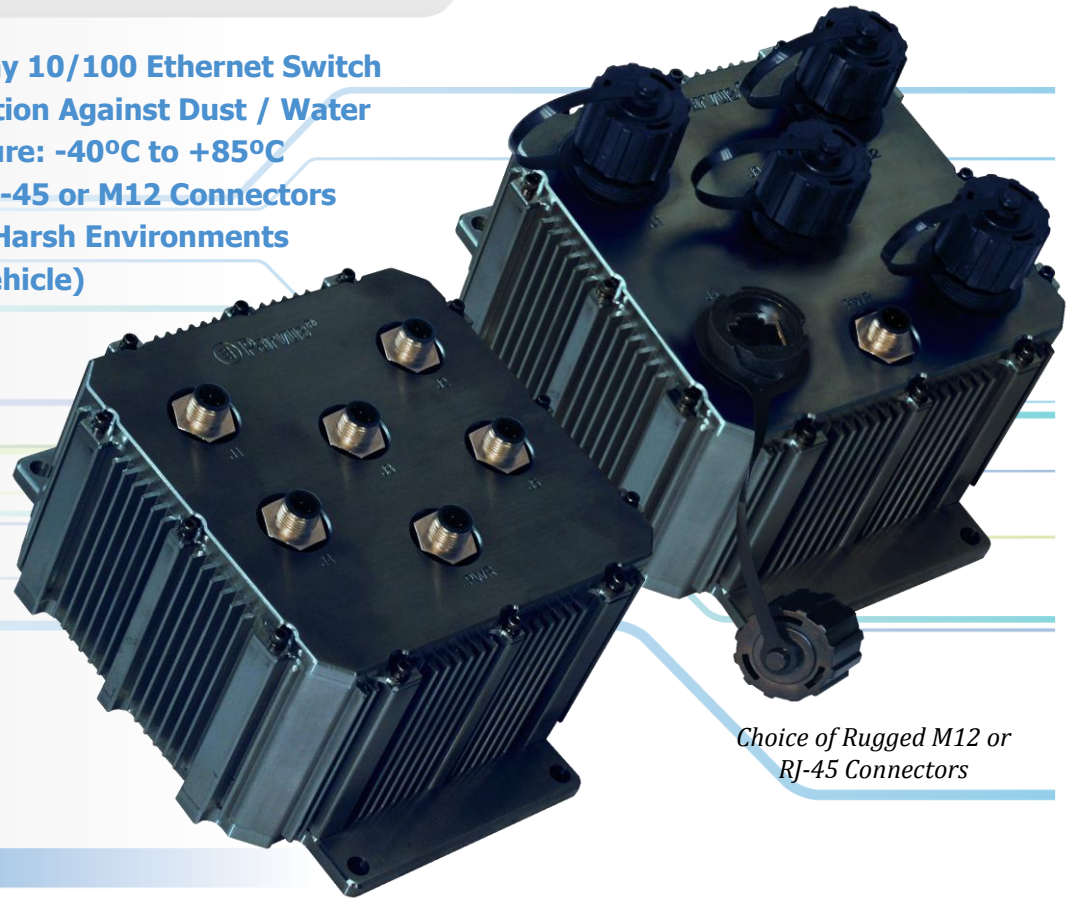


DuraNET 10-10

- Rugged Plug and Play 10/100 Ethernet Switch
- IP67 Ingress Protection Against Dust / Water
- Extended Temperature: -40°C to +85°C
- Choice of Rugged RJ-45 or M12 Connectors
- Designed for use in Harsh Environments (Outdoor, Mobile, Vehicle)



Choice of Rugged M12 or RJ-45 Connectors

FEATURES

RUGGED MECHANICAL DESIGN

- Water Tight, Sealed Metal Enclosure
- Anodize Coated Aluminum Chassis for Durability
- Integrated Heat sinking for Fanless Cooling
- Extended Temperature Operation: -40°C to +85°C / -40°F to +185°F
- Rugged RJ-45 or M12 Connectors for Anti-Shock/Vibe Protection
- IP67 Ingress Protected from Sand, Dust, Moisture, Immersion
- Bulkhead Mountable Enclosure with Integrated Flanges
- Inherently Rugged Open Architecture PC-104 Based

ETHERNET PORTS

- Five (5) 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

- Unmanaged Switch: No Configuration Required; Plug and Play
- Non-Blocking Switch Fabric – 10/100Mbps Port Connectivity
- Five Fully Independent Media Access Controllers

RELIABLE POWER

- Robust Vehicle-Grade DC Power Supply
- Voltage/Surge Protection and EMI Filtering
- Galvanic Isolation (select models)

- Defense & Homeland Security
- Outdoor, Vehicle, Shipboard Applications
- Heavy Industry, Energy, Public Transportation

The DuraNET10-10 is an IP67-protected rugged unmanaged Ethernet switch designed to provide local area network (LAN) connectivity to IP-enabled equipment, such as onboard computers, cameras, sensors, monitoring devices, and command-and-control gear for situation awareness and information sharing in harsh temperature and vibration environments, including tactical, mobile, vehicle, or outdoor applications.

Featuring a robust mechanical design and extended temperature operation from -40°C to +85°C (-40°F to +185°F), the DuraNET 10-10 network switch provides five 10/100 plug-and-play Ethernet ports over rugged field deployable RJ-45 or M12 connectors in a sealed and fanless metal chassis designed for mounting to any machine or flat surface. With provisions for exposure to wide thermal ranges, shock, vibration, dust particles, and liquid immersion, the rugged rugged DuraNET 10-10 combines proven and open-architecture PC104 Ethernet switch and vehicle-grade power supply components in a rugged package designed for maximum reliability under extreme conditions, including provisions for hazardous locations and potentially explosive atmospheres.

Featuring five IEEE 802.3/u compliant (10/100mpbs) Ethernet transceiver ports and support for auto-MDI-MDIX network installation, the robust unit requires no configuration. 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. A non-blocking switching fabric provides excellent data transmission performance at wire speed.

Specifications



Rugged Field RJ-45 Connector Option



Rugged M12 Connector Option



IP67 Protected Even Without Caps On

| | |
|-----------------------|--|
| APPLICATIONS | Ethernet switching in extreme environments (cold / hot temperatures, humidity, rain, dust, impact, vibration, shock). Well suited for tactical, mobile, outdoor, and vehicle applications, such as border security, disaster recovery, first responder vehicles, underground mining, offshore drilling, oil exploration, petrochemical processing plants, shipboard, and critical infrastructure (i.e. electric utility substations, energy grid) |
| DATA TRANSFER | <ul style="list-style-type: none"> • Unmanaged Switch: No Configuration Required • 10 Mbits/sec or 100 Mbits/sec, Full Duplex or Half Duplex Mode • 512 Kb Frame Buffer Memory; 1,024 MAC Address Look-up Engine • Store-and-Forward Switching |
| 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 |
| CONNECTIONS | <ul style="list-style-type: none"> • Ports: Five (5) Ethernet Ports, One (1) Power Input • Ethernet Connectors: IP67 Rated RJ-45 (with caps) or 4-Pin M12 Male – Fully Sealed against Dust/Water and Field Deployable • Power Connector: 3-Pin M12 Male |
| POWER | <ul style="list-style-type: none"> • Voltage Input: 12 / 24 / 28 VDC (Choice of Integrated DC Power Supplies to Support Voltage Ranges of 8 to 40 VDC or 18 to 36VDC) • Galvanic Isolation Supported on 18-36V Model • Power Consumption: Estimated at < 8W • Power Protections: Transient, Surge, Reverse Polarity Protected |
| PHYSICAL | <ul style="list-style-type: none"> • Dimensions (LxWxH): 5.6" (~14.2 cm) x 5.9" (~15.0 cm) x 3.0" (~7.62 cm), Excluding Connectors & Mounting Plate (7.1" / 18cm wide w/ mounting plate) • Weight: ~3.5 lbs (~ 1.58 kg) • Installation: Integrated Flange Mount Plate for Bulkhead / Wall Mount • Chassis: Aluminium Alloy, Corrosion Resistant, Anodize Finish • Cooling: Passive Natural Convection. No Moving Parts • Degree of Protection: IP67 / NEMA 6 Dust Proof / Waterproof Even Without Connector Covers |
| ENVIRONMENTAL | <ul style="list-style-type: none"> • Temperature: -40 to +85C (-40°F to +185°F) • Shock and Vibration: Designed for Mobile, Vehicle, Marine, & Offshore Use • Humidity: Up to 95% RH @ 40C, Non-Condensing • Water Immersion: 1 Meter Submersion (Similar to IPX7) • Dust Ingress: No Dust Ingress (Similar to IP6X) |
| PENDING APPROVALS | <ul style="list-style-type: none"> • Designed for Compliance with: <ul style="list-style-type: none"> • Hazardous Locations: UL 1604 / CSA C22.2/213 (Class 1, Division 2) • Emissions: FCC Part 15 Class A • Explosive Atmosphere (CE ATEX) |
| RELIABILITY | <ul style="list-style-type: none"> • Designed & Manufactured using ISO 9001:2000 Certified Quality Program • Industrial-Grade Components, Including Circuit Card Assemblies Qualified to MIL-STD-810 • No Moving Parts; Passively Cooled |
| WARRANTY | 1 Year Return to Factory Warranty (Extended Service Contracts Available) |
| ACCESSORIES | <ul style="list-style-type: none"> • Starter Cable for Ethernet Port (Mating M12 to Standard RJ-45 for Ethernet); Starter Cable for Power Connection (Mating M12 to Banana Plugs for Power) - for Lab / Non-Rugged Use |
| SPECIAL ORDER OPTIONS | <ul style="list-style-type: none"> • MIL-STD-810 / MIL-STD-461 Certified Units with MIL-DTL-38999 Connectors – See DuraNET 1059 Datasheet • Conformal Coated Printed Circuit Boards (PCBs) • Status Indicators (LEDs); Port-Based VLAN Support; Fiber Optic Interfaces • Roadmapped Configuration: Gigabit Ethernet Ports; Web-Based Management |

Note: The information in this document is subject to change without notice and should not be construed as a commitment by Parvus. While reasonable precautions have been taken, Parvus assumes no responsibility for any error that may appear in this document. All trademarks or registered trademarks are the properties of their respective companies.