

# DuraNET 2955

## Ruggedized Cisco 2955 Catalyst Ethernet Switch

- Ruggedized Cisco IOS Managed Switch
- Designed to MIL-STD-810F
- Power Consumption: 15W Typical
- Weight: 7.0lbs (3.2kg)
- -40°C to +71°C Operating Temp



## FEATURES

### ETHERNET PORTS

- 12x switched 10/100 (Fast Ethernet) ports
- 2x 10/100/1000BASE-T (Gigabit) uplink ports

**CISCO INSIDE:** Based on Cisco Catalyst 2955T-12 Industrial Ethernet Switch

### MANAGEMENT

- Cisco IOS® with data, video, and voice service features for security, QoS, and high availability
- Remote Monitoring (RMON) software agent
- Cisco Cluster Management Suite (CMS)
- CiscoWorks SNMP Network Management

**NETWORKING:** Full duplex capability, fault tolerance, uplink, VLAN support, IGMP snooping, manageable

### CONNECTORS:

- MIL-C-38999 (Power, console & ethernet signals)
- DB9 (Serial console port)

### CHASSIS:

- Low profile rugged aluminum extrusion
- Conductively cooled w/custom internal heatsinks
- Ingress protection against sand, dust and moisture
- Anodize Coating, MIL-A-8625, Type II, Class 2

**REMOTE MANAGEMENT PROTOCOLS:** RMON I, RMON II, SNMPv1, SNMPv2c, SNMPv3, IGMP, IP, RADIUS, TCP, UDP, Telnet

The DuraNET® 2955 is a ruggedized version of the Cisco 2955T-12 Ethernet switch, a fully managed industrial-grade network switch offering 12 Fast Ethernet ports, 2 Gigabit Ethernet uplinks, and Cisco IOS® software functionality for traditional data, video and voice services with enhanced intelligent services features for additional security, advanced Quality of Service (QoS), high availability, and manageability. Administrators can easily configure features, monitor performance, and troubleshoot using a standard Web browser.

Developed for military and harsh mobile applications, the Commercial-off-the-Shelf (COTS) DuraNET 2955 features mechanical packaging enhancements designed for MIL-STD-810F airborne environmental compliance and high reliability. The unit has been specially hardened to improve ingress, impact, and shock/vibration protection, as well as eliminate all moving parts through passive cooling, and interface through sealed MIL-C-38999 circular connectors. Leveraging best-in-class switching and management technology from Cisco, the DuraNET 2955 serves as a robust COTS solution for providing local area network (LAN) connectivity to IP-enabled computing and net-centric devices. Compact in size, the DuraNET 2955 is particularly useful for expanding port density to tactical IP routers, such as the DuraMAR, in space-constrained airborne and ground vehicle environments.

## Specifications



### PERFORMANCE

- 4.8 Mpps wire speed forwarding rate
- 6.4 Gbps maximum forwarding bandwidth
- Configurable up to 8000 MAC addresses
- MAC Address Table Size: 8K entries

### STANDARDS COMPLIANCE

- IEEE 802.1d Spanning Tree Bridge
- IEEE 802.1p LAN L2 QoS/CoS Traffic Prioritization Protocol
- IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)
- IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
- IEEE 802.1x Port Access Control for WLANs
- IEEE 802.3 10 Mbps 10BASE-T (Ethernet)
- IEEE 802.3ab 1000BASE-T 1000 Mbps (Gig Ethernet)
- IEEE 802.3ad Link aggregation Control Protocol (LACP)
- IEEE 802.3u 100BASE-TX 100 Mbps (Fast Ethernet)
- IEEE 802.3x Flow Control
- IEEE 802.1Q Virtual LANs (VLAN)

### SECURITY

- Layer 2, Layer 3, Layer 4 Incoming Traffic Flow Access Control Filtering
- Private VLAN Edge Port Security and Unicast MAC Filtering
- 802.1x VLAN Assignment, Port Security Authentication
- SSHv2 and SNMPv3 Encryption
- Spanning-Tree Root Guard (STRG) and Bridge Protocol Data Unit (BPDU) Guard
- Multi-Level Console Access Security
- TACACS+ and RADIUS Authentication
- IGMP Filtering for Multicast Authentication
- SPAN Support for Intrusion Detection Systems
- Cisco Network Assistant Software Security Wizard

### POWER

- Voltage Input: 24Vdc Nominal (18-32V)
- Compliance: MIL-STD-704D
- Power Consumption: 15W Typical
- Overload Protection: Over 1.5 Times Normal Current
- Ground: Grounding Lug for Connection to System Chassis Ground

### SHOCK/VIBRATION

Designed to meet MIL-STD-810F; All tall/large components have been securely potted in place for enhanced shock/vibration resistance

### PHYSICAL

- Dimensions (LxWxH): 10.48" (266.19mm) x 6.745" (171.32mm) x 3.20" (81.28mm) - including Connectors & Hardware
- Weight: 7.0lbs (3.2kg)
- Installation: Four 10-32 Mounting Holes on Bottom
- Chassis: Aluminum Alloy 6061-6063, Corrosion Resistant
- Finish: Black Anodize (MIL-A-8625, Type II, Class 2)

### TEMPERATURE

- Tested to MIL-STD-810F:
- Operating Temperature: -40°C to +71°C (-40°F to +160°F)
  - Storage Temperature: -40°C to +85°C (-40°F to +185°F)
  - Cooling: Passive Conductive Heatsinks. No Moving Parts.

### HUMIDITY

- Designed to Meet MIL-STD-810F
- 10 to 95%, Non-Condensing

### SHOCK / VIBRATION

- Tested to MIL-STD-810F (Jet & Helicopter Test Profiles)
- Operating Shock: 15g, 11ms, ½ Sine Wave, 3 Pos/Neg per Axis, Total of 18 Pulses
  - Random Vibration: 0.022-G<sup>2</sup>/10-Hz to 0.0026-G<sup>2</sup>/2000-Hz
  - Tall/Large Components are Securely Potted in Place for Enhanced Shock/Vibration Resistance

### MTBF

- Calculated per MIL-HDBK-217F:
- 225,124 Hours or 25.7 Years (@25°C Ground Benign)

### HARDWARE WARRANTY

- Standard 90-day (1 year extended available)

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