

Raychem Cat 5e Cable

Lightweight, Rugged Ethernet Cables for Reliable 100 Mb/s and 1 Gb/s High Speed Data Transmission

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VERSATILE

- Harness component system compatibility
- Zero halogen jackets available for low smoke and low toxicity requirements
- High temperature fluoropolymers offer temperature ranges from -65°C to +200°C
- Gauge size availability: 24 AWG

PERFORMANCE DRIVEN

- Tested in accordance with ANSI/TIA-568-C.2
- Qualified to MIL-DTL-24643

OPTIMIZED

- Utilization of low loss foamed dielectrics
- Flat and round braid capabilities
- Extrusion of thin, rugged jackets

APPLICATIONS

- Shipboard
- Satellite
- Missiles
- C4ISR
- Weapons Systems
- Avionic Systems
- Soldier Systems
- In-Flight Entertainment

Description

TE Connectivity's (TE) Cat 5e Ethernet cables are designed to provide high performance, rugged, lightweight, reliable constructions that can handle speeds up to 1 Gb/s, critical for high data rate communication. We utilize high performance engineering materials which are typically seen in the Aerospace, Defense and Marine markets.

High Performance and Lightweight

TE utilizes foamed low loss fluoropolymer and high-density polyethylene dielectrics. When coupled with our optimized braids and lightweight ruggedized outer jackets, TE can provide customizable solutions meeting your critical design requirements.

Mil Qualified and Custom Designs

Qualified to MIL-DTL-24643/59 and /61.

TE also offers custom designs specifically tailored to meet customer needs.

Waterblock Capability

TE's waterblock designs utilize Super Absorbent Tapes and Yarns which improve termination time when compared to silicon filled water block designs. Additional advantages of waterblock tapes and yarns include lighter weight constructions, more flexible cables, and lower total cost of installation.



TE Components . . . TE Technology . . . TE Know-how . . .

AMP | AGASTAT | CII | HARTMAN | KILOVAC | MICRODOT | NANONICS | POLAMCO | Raychem
SEACON | Rochester | DEUTSCH

Empower Engineers to Solve Problems, Moving the World Forward.



MATERIALS

- **Conductor:** Tin-coated copper, Silver-coated copper, and Silver-coated high strength copper
- **Dielectrics:** Foamed polyethylene and Foamed FEP
- **Shields:** Aluminized wrap + round braid or flat + round braid (Optimized shielding available)
- **Outer Jackets:** Zerohal, FEP, ETFE, and FDR-25
- **Waterblock Availability:** Super absorbent tapes and yarns
- **Available Jacket Colors:** black, white, brown, red, orange, yellow, green, blue, violet, gray and clear (translucent variations available) – dependent on jacket material



ELECTRICAL

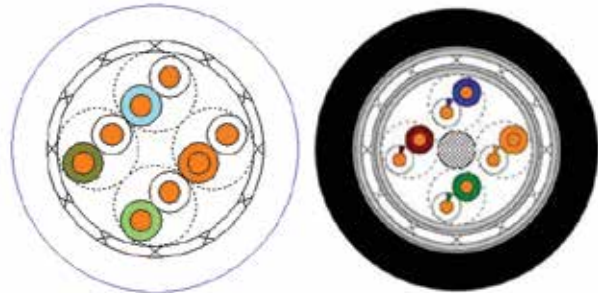
- **Standard Impedance (Nom):** 100 ohms
- **Attenuation (Max.) at 100 MHz:** dependent upon conductor type
- **Mutual Capacitance (Max.) at 1 kHz:** 5.6 nF/100 m
- **DC Resistance (Nom.) at 20°C:** 8.43 ohm/100m

ENVIRONMENTAL/MECHANICAL

- **Temperature Range:** -65°C to +200°C

STANDARDS/SPECIFICATIONS

- **Ethernet Cable:** ANSI/TIA-568-C.2
- **Environmental Testing:** WC27500/AS6070
- **Flammability (Only for Aerospace):** FAR Part 25, Appendix F, Part 1 and AS6070
- **Smoke and Toxicity:** BSS7238 and 7239
- **Marine:** M24643/59 and /61



PRODUCT INFORMATION

Part Description	Temperature Range (°C)	Jacket OD (in/mm), Nom.
Military Aerospace / Commercial Aerospace / Ground Systems		
C5E-24C424-B24	-65 to 200°C	0.255 / 6.477
C5E-24C424-814	-65 to 150°C	0.257 / 6.528
C5E-24C124-C14	-65 to 150°C	0.282 / 7.163
Ground Systems		
C5E-24B114-Y1F	-40 to 115°C	0.328 / 8.331
Marine / Ground Systems		
C5E-24B114-Y18	-40 to 105°C	0.328 / 8.331
Marine		
M24643/61-02UD	-30 to 105°C	0.336 / 8.534
M24643/61-01UO	-30 to 105°C	0.318 / 8.077
M24643/61-03UO	-30 to 105°C	0.329 / 8.357
M24643/59-04UO	-30 to 105°C	0.377 / 9.576

Additional constructions and custom designs available upon request - please contact your local account representative for questions.

LET'S CONNECT

We make it easy to connect with our experts and are ready to provide all the support you need. Just call your local support number or visit te.com to chat with a Product Information Specialist.

Technical Support

te.com/support-center

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Consult TE for the latest dimensions and design specifications.

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