

INTRODUCING

RAYCHEM SINGLE PAIR ETHERNET CABLES

- Enabling 100 MB/s or 1 GB/s Ethernet connectivity
- Meets aerospace flammability, smoke and toxicity requirements
- Reduced size and weight



TE Connectivity (TE) has released a Single Pair Ethernet (SPE) cable that enables the transmission of data by ethernet using one twisted pair. This product is currently capable of transmission rates ranging from 100 MB/s to 1 GB/s. These cables are available in both 24 and 26 AWG, with a temperature range of -65°C up to +150°C for your commercial aerospace applications.

APPLICATIONS

- Avionics
- Inflight Entertainment (IFE)
- Galley Systems
- · Interior Cabin Lighting
- eVTOL

TARGET MARKETS

- Military & Commercial Aerospace
- Defense
- Low Earth Orbit Satellites
- eVTOL

KEY BENEFITS

- Meets aerospace industry fmallability, smoke and toxicity requirements
- Reduced size and weight as compared to existing multi-pair ethernet systems
- Termination time: Octax/Quadrax: 15-20 minutes vs 369 Series: 2-5 minutes
- Single pair cable vs 2 or 4 pair systems
- Offers end-to-end solution using ARINC 854 connectors

STANDARDS & SPECIFICATIONS

- Meets ARINC 800 requirements
- Flammability: FAR Part 25, Appendix F, Park 1 & AS4373
- Smoke Density and Toxicity: BSS7238, BSS7239, AITM 2-0008 and AITM 3-0005

ELECTRICAL

- Differential Impedance: 100 \pm 10 Ω
- Attenuation (Max) at 600 MHz: 24 AWG: 14.4dB/15m
 26 AWG: 14.4dB/15m
- Mutual Capacitance (Max) at 1 kHz: 13 pF/1ft
- Temperature Rating: -65°C to +150°C

MATERIALS

- Conductors: 24 and 26 AWG silver coated high strength copper alloy
- · Dielectric: Foamed FEP
- Inner Shield: AI/PET
- · Shielding: Silver-coated copper
- Jacket: FEP
- Available Jacket Colors: Laser markable white, black, white, brown, red, orange, yellow, green, blue, violet, gray and clear (translucent available)

LEARN MORE

Raychem SPE Landing Page
Raychem SPE Parts List
Raychem SPE Brochure