

## CABLE CONSTRUCTION

1. PTFE Tape (White) Laser Markable
2. Silver-Plated Copper Shield
3. Aluminum/Polyimide Shield
4. PTFE Binder - White
5. Fluoropolymer Spline
6. Fluoropolymer Insulation
7. Silver-Plated Copper Alloy Conductors
8. Silver-Plated Copper Conductors

## COLOR CODES

Pair #1: Blue, White/Blue

Pair #2: Orange, White/Orange

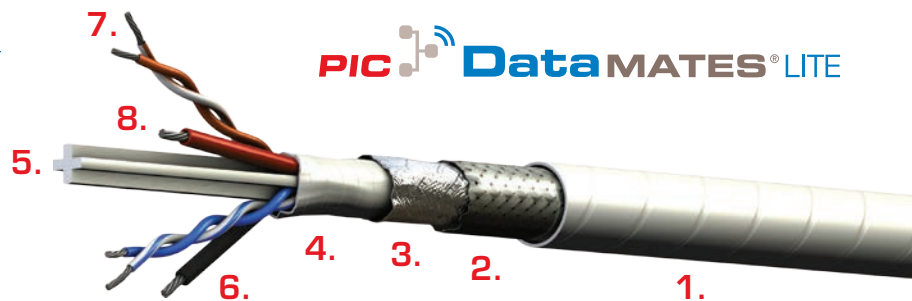
Power Conductors: Red, Black

This Power over Ethernet (PoE) cable incorporates innovative design features that provide maximum electrical performance in a small, lightweight, flexible package.

This cable is manufactured with a white PTFE tape jacket that is laser-markable and also very rugged, passing the abrasion testing of EN3475-503. The data pairs are manufactured using a high temp Fluoropolymer. The data pairs will perform at frequencies from CAT 5e, up to CAT 6a requirements.

Data transmission aboard aircraft faces more severe environmental and EMI situations than conventional LAN systems in commercial buildings, hence special measures have been taken to preserve technical performance. Silver-plated copper conductors and shielding assure uniform conductivity with excellent solderability.

E5E3624 is ideal for harsh environment applications that demand high reliability, maximum flexibility and light weight, such as cabin management, in-flight entertainment, internet backbones. It is Skydrol resistant, RoHS compliant and passes the FAA flammability requirements of FAR Part 23 and 25, Appendix F.



## PHYSICAL DATA

- Conductors:
  - Data Pair 24 AWG Stranded SPCA
  - Power Pair 20 AWG Stranded SPC
- Shield Coverage: 90% (Braid)
- Operating Temperature: -55° to +200°C
- Outer Diameter: in (mm) 0.25 (6.35)
- Minimum Bend Radius: in (mm) 0.80 (20.32)
- Weight: lbs/100 ft (kg/100 m) 4.5 (6.7)

## ELECTRICAL DATA

### Data pair

- Impedance: ohms 100
- Capacitance: pF/ft (m) 14.0 (46.0)
- Velocity of Propagation: % 70.0
- Dielectric Voltage Rating (kV, RMS) Max 1.5
- DC Resistance: ohms/1000 ft (m) Max 28.5 (93.5)
- Max Distance\*: ft (m) 268 (82)
- Attenuation: Nom / Max dB/100 ft (dB/100 m)
  - @10 MHz 2.2 / 2.6 (7.2 / 8.5)
  - @100 MHz 6.8 / 8.2 (22.3 / 26.9)

### Power pair

- Dielectric Voltage Rating (V, rms) Max 600
- DC Resistance (ohms/1000 ft.) (m) Max 9.1 (29.9)

*All values nominal unless otherwise noted*



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