

RAYCHEM USB 3.1 CABLE

PROVIDES UP TO 10 GB/S DATA RATES WITH FULL LEGACY
USB 2.0 SUPPORT AND FULL USB 3.1 POWER



Provides up to 10 Gb/s data rates with full legacy USB 2.0 support and full USB 3.1 power



REDUCED HARNESSING TIME AND COST

- Use of an extruded component and jacket leads to simplified termination when compared to competitors using tape wrap construction

INCREASED USB DATA RATES

- Provides power for USB 3.1 while still providing legacy USB 2.0 support
- Double the bandwidth of USB 3.0

TARGET MARKETS

- Commercial Aerospace
- Military Aerospace
- eVTOL (electric Vertical Take Off and Landing)
- UAM (Urban Air Mobility)
- UAV (Unmanned Aerial Vehicles)

Description

TE Connectivity's (TE) new USB 3.1 cable provides up to 10 Gb/s and USB 3.1 power supporting commercial and military aerospace applications. This cable also supports USB 2.0 legacy applications.

ELECTRICAL

- **Impedance:** Legacy pairs: 90 +/- 13.2 ohms
USB 3.1 pairs: 90 +/- 5 ohms
- **Voltage Withstand:** 1500 V_{rms} conductor to conductor
500 V_{rms} conductor to shield
- **Velocity of Propagation (nom.):** 74%
- **Capacitance (nom.):** 15.5 pF/ft (50.9 pF/m)
- **Skew (nom.):** 4.6 ps/ft (15 ps/m)

ENVIRONMENTAL

- **Temperature Range:** -65°C to +200°C
- **Flammability:** Meets the requirements of FAR part 25, Appendix F, Part 1 when tested in accordance with the 60-degree test as specified
- **Jacket Tensile Strength:** 2000 psi min.
- **Jacket Elongation:** 200% min.

MATERIALS

- **Conductor:** Silver-coated high-strength copper alloy
- **Dielectric:** Foamed skin FEP
- **Overall Wrap:** PTFE
- **Shielding:** Silver-coated copper
- **Outer Jacket:** FEP
- **Jacket Color:** Black, (additional colors available upon request, including laser markable)

SPECIFICATIONS

- USB 3.1
- **TE Product Specification:** 1200
- **Smoke Density and Toxicity:** BSS7238 and BSS7239
- **Environmental Testing, Jacket and Marking:** ANSI/NEMA WC 27500

Raychem USB 3.1 Cable

APPLICATIONS

- In-Flight Entertainment (IFE)
- Data Tansfer
- Missiles
- Avionic Systems
- Electronic Flight Bag



Construction Details

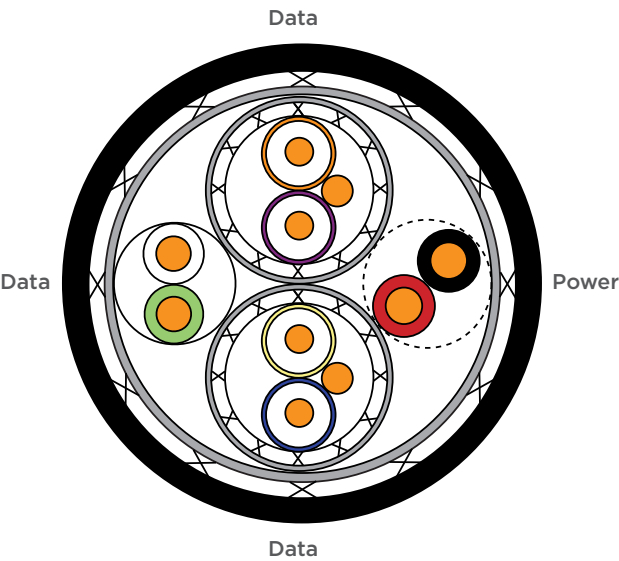


TABLE 1

Data	Pair	Wire Insulation Color
A	1	9 (White) / 5L (Light Green)
B	1	3L (Light Orange) / 7L (Light Purple)
B	2	4L (Light Yellow) / 6L (Light Blue)
Power	Cable	
C	1	2 (Red) / 0 (Black)

TE Internal #: EP5675-000

Part Description	AWG Size of Pairs		Cable Outer Diameter In (mm)	Cable Weight lbs/kft (kg/km)	Insertion Loss (dB/4.5 m)		
	Data	Power			100 MHz	200 MHz	400 MHz
U31-26C493C124	26	24	0.277 (7.035)	52.44 (78.04)	2.90	4.20	6.80

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QUALITY STARTS WITH THE RIGHT APPLICATION TOOLING

Creating a quality crimp connection is essential to delivering high performance and reliability in extreme environments. From low to high volume wire processing, TE has you covered with a full range of application tooling and a global field service team.

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