

PIC E51428

100 BASE-T STAR QUAD ETHERNET CABLE

CABLE CONSTRUCTION

- 1. PTFE Tape Jacket (White) Laser Markable
- 2. Silver-Plated Copper Round Braid Shield
- 3. PTFE Tape Binder Clear
- 4. Solid PFA Insulation
- 5. Fluoropolymer Filler
- Silver-Plated High Strength Copper Alloy Conductors



Pair #1 - White/Blue Pair #2 - Orange/Green

This lightweight, low loss cable has been specially designed by PIC for airborne 100 Base-T data applications as defined by ARINC Specification 664.

Data transmission aboard aircraft faces more severe environmental and EMI situations than conventional LAN systems in commercial buildings, hence the shielding to preserve technical performance.

A PTFE tape jacket protects the cable against abrasion and environmental effects while maintaining flexibility for ease of installation and is laser markable.

E51428 exceeds Category 5e requirements, is Skydrol resistant and meets the FAA flammability requirements of 14 CFR Part FAR 25.869(a)(4) Amdt 25-113 Appendix F Part I (a)(3).



PHYSICAL DATA

 Conductors 	28 AWG (7/36) Stranded SPCA
Shield Coverage	80% (Braid)
Operating Temperature	-55° to +200°C
• Outer Diameter: in (mm)	0.11 (2.92)
• Minimum Bend Radius: in (m	m) 0.60 (15.24)
• Weight: lbs/100 ft (kg/100 n	n) 1.0 (1.5)

ELECTRICAL DATA

• Impedance: ohms		100
• Capacitance: pF/ft (m)		14.5 (47.6)
 Velocity of Propagation: % 		70.0
Dielectric Voltage Rating (kV RMS)		1.5
DC Resistance: ohms/1000 ft (m) Max		74.8 (245.4)
• Max Distance*: ft (m)		170 (51)
Attenuation: Nom / Max	dB/100 ft	(dB/100 m)
• @10 MHz • @100 MHz	3.7 / 4.1 11.1 / 12.4	(12.1 / 13.5) (36.4 / 40.7)

All values nominal unless otherwise noted *Note: The max distance is based on maximum channel insertion loss per ANSI/TIA-568-C.2







