

As aircraft avionics become more complex, the need for an increase in bandwidth and reliability becomes increasingly important. With Ethernet replacing ARINC 429 point-to-point connections, the industry needs scalable networks that provide the best quality of service without fail.

For over 50 years, PIC Wire & Cable has been the trusted source for aerospace cable. Our PICmates Ethernet Cables include 1 pair, 2 pair, 4 pair and Quadrx 100 ohm shielded ethernet cables carrying high-speed data up to 10G performance. Our specially engineered Cat5e/6/6a cables perform high-speed transmission needs in different aircraft cabins or flight decks for various purposes.

APPLICATIONS:

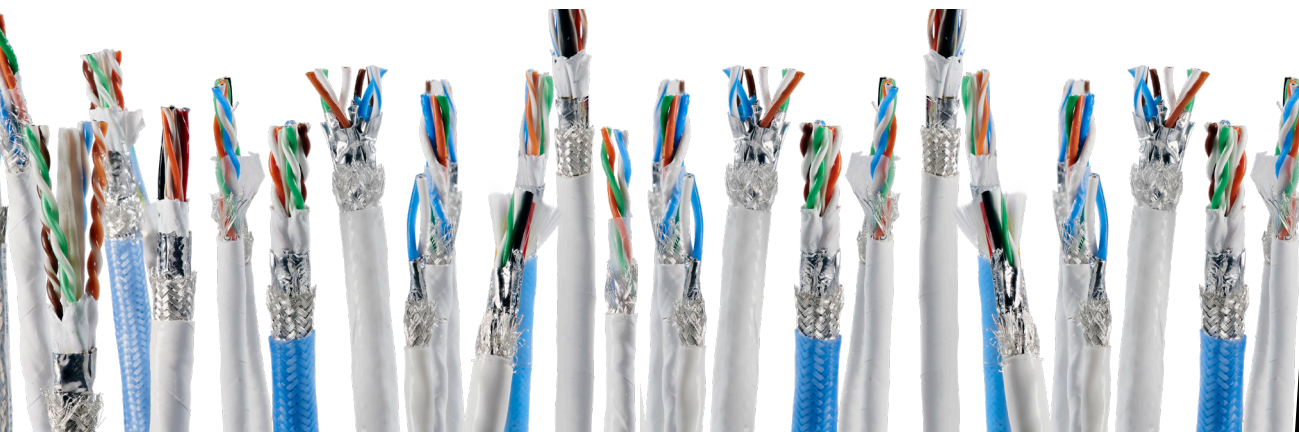
- Avionics Network
- Cabin/Flight Management Systems
- Digital Video Systems
- Ethernet Backbone
- Program Upgrades (commercial/business)
- Other Harsh Aerospace Environments

PHYSICAL & ELECTRICAL DATA (1 PAIR CABLES)

All values nominal, unless otherwise noted

PART #	SPEED RATING	DATA CONDUCTOR	JACKET	WEIGHT LBS/100 FT (KG/100 M)	O.D. IN (MM)	TEMP. RANGE	MAX. DISTANCE FT (M)
E10222	CAT5E 10/100 BASE-T	22 AWG TPC	ETFE, White (Laser Markable)	2.3 (3.4)	0.19 (4.80)	-50/+200°C	362 (110)
E5E2222-D	CAT5E 10/100 BASE-T	22 AWG SPC	ETFE, White (Laser Markable)	2.3 (3.51)	0.18 (4.65)	-55/+200°C	*
E13224	CAT5E 10/100 BASE-T	24 AWG SPHSCA	PTFE, White (Laser Markable)	2.2 (3.3)	0.16 (4.06)	-55/+150°C	328 (100)
E60224	CAT5E 10/100 BASE-T	24 AWG SPC	ETFE, White (Laser Markable)	0.9 (1.3)	0.10 (2.59)	-55/+200°C	*
E12224	CAT5E 10/100 BASE-T	24 AWG TPC	ETFE, White (Laser Markable)	1.6 (2.4)	0.15 (3.71)	-55/+200°C	255 (78)
E20224	CAT5E 10/100 BASE-T	24 AWG SPCA	ETFE, White (Laser Markable)	1.1 (1.6)	0.14 (3.58)	-55/+200°C	273 (83)
E5E2224-D	CAT5E 10/100 BASE-T	24 AWG SPHSCA	ETFE, White (Laser Markable)	2.0 (3.0)	0.16 (4.06)	-55/+200°C	*
E61224	CAT5E 10/100 BASE-T	24 AWG SPHSCA	ETFE, White (Laser Markable)	1.9 (2.8)	0.15 (3.81)	-50/+200°C	328 (100)
E10224	CAT5E 10/100 BASE-T	24 AWG SPHSCA	FEP, Translucent Blue	2.2 (3.2)	0.16 (4.06)	-50/+200°C	328 (100)
E13226	CAT5E 10/100 BASE-T	26 AWG SPHSCA	PTFE, White (Laser Markable)	1.7 (2.5)	0.13 (3.40)	-55/+200°C	224 (68)

Materials Key: TPC – Tin-Plated Copper, SPC – Silver-Plated Copper, SPCA – Silver-Plated Copper Alloy, SPHSCA – Silver-Plated High Strength Copper Alloy
*no maximum distance



ETHERNET CABLE SOLUTIONS

All values nominal, unless otherwise noted

PHYSICAL & ELECTRICAL DATA (2 PAIR CABLES)

PART #	SPEED RATING	DATA CONDUCTOR	JACKET	WEIGHT LBS/100 FT (KG/100 M)	O.D. IN (MM)	TEMP. RANGE	MAX. DISTANCE FT (M)
E10422	CAT5E 10/100 BASE-T	22 AWG SPC	FEP, Translucent Blue	3.7 (5.5)	0.30 (7.94)	-55/+200°C	328 (100)
E13424	CAT5E 10/100 BASE-T	24 AWG SPHSCA	PTFE, White (Laser Markable)	2.9 (4.3)	0.22 (5.59)	-55/+200°C	262 (80)
E12424	CAT5E 10/100 BASE-T	24 AWG TPC	ETFE, White (Laser Markable)	2.3 (3.4)	0.21 (5.28)	-55/+150°C	257 (78)
E40424	CAT5E 10/100 BASE-T	24 AWG SPC	ETFE, White (Laser Markable)	2.7 (4.1)	0.21 (5.28)	-55/+200°C	268 (82)
E61424	CAT5E 10/100 BASE-T	24 AWG SPCA	ETFE, White (Laser Markable)	2.9 (4.3)	0.22 (5.59)	-55/+200°C	269 (80)
E20424	CAT5E 10/100 BASE-T	24 AWG SPC	FEP, Translucent Blue	4.2 (6.2)	0.27 (6.73)	-55/+200°C	296 (90)
E10424	CAT5E 10/100 BASE-T	24 AWG SPC	FEP, Translucent Blue	3.3 (4.9)	0.21 (5.28)	-55/+200°C	268 (82)
E13426	CAT5E 10/100 BASE-T	26 AWG SPCA	PTFE Laser Markable	2.0 (2.9)	0.16 (3.99)	-55/+200°C	224 (68)

Materials Key: TPC – Tin-Plated Copper, SPC – Silver-Plated Copper, SPCA – Silver-Plated Copper Alloy, SPHSCA – Silver-Plated High Strength Copper Alloy

PHYSICAL & ELECTRICAL DATA (QUADRIXIAL CABLES)

PART #	SPEED RATING	DATA CONDUCTOR	JACKET	WEIGHT LBS/100 FT (KG/100 M)	O.D. IN (MM)	TEMP. RANGE	MAX. DISTANCE FT (M)
E51424	10/100 BASE-T	24 AWG SPHSCA	ETFE, White (Laser Markable)	2.2 (3.3)	0.16 (4.06)	-55/+150°C	255 (78)
E50424	10/100 BASE-T	24 AWG SPHSCA	FEP, Translucent Blue	2.7 (4.0)	0.17 (4.32)	-55/+200°C	236 (72)
E51426	10/100 BASE-T	26 AWG SPCA	ETFE, White (Laser Markable)	1.8 (2.7)	0.14 (3.48)	-55/+150°C	214 (65)
E51428	10/100 BASE-T	28 AWG SPHSCA	PTFE, White (Laser Markable)	1.0 (1.5)	0.11 (2.92)	-55/+200°C	170 (51)

Materials Key: TPC – Tin-Plated Copper, SPC – Silver-Plated Copper, SPCA – Silver-Plated Copper Alloy, SPHSCA – Silver-Plated High Strength Copper Alloy

PHYSICAL & ELECTRICAL DATA (4 PAIR CABLES)

PART #	SPEED RATING	DATA CONDUCTOR	JACKET	WEIGHT LBS/100 FT (KG/100 M)	O.D. IN (MM)	TEMP. RANGE	MAX. DISTANCE FT (M)
E6A3824	CAT6A 10G BASE-T	24 AWG SPC	PTFE, White (Laser Markable)	4.6 (6.8)	0.26 (6.60)	-55/+200°C	262 (80)
E6A6824	CAT6A 10G BASE-T	24 AWG SPHSCA	PTFE, White (Laser Markable)	4.4 (6.5)	0.26 (6.60)	-55/+200°C	246 (75)
E6A5824	CAT6A 10G BASE-T	24 AWG SPHSCA	PTFE Tape (White) Laser Markable	4.2 (6.3)	0.26 (6.60)	-55/+200°C	296 (90)
E6A2824	CAT6A 10G BASE-T	24 AWG TPC	ETFE, White (Laser Markable)	4.5 (6.8)	.027 (6.99)	-55/+150°C	214 (65)
E74824	CAT7 10G BASE-T	24 AWG SPCA	ETFE, White (Laser Markable)	4.7 (7.0)	0.28 (7.11)	-55/+200°C	296 (90)
E50824	CAT5E 1000 BASE-T	24 AWG SPC	FEP, Translucent Blue	5.0 (7.4)	0.27 (6.73)	-55/+200°C	268 (82)
E6A0824	CAT6A 10G BASE-T	24 AWG SPC	FEP, Translucent Blue	5.3 (7.9)	0.28 (6.9)	-55/+200°C	246 (75)
E6A6826	CAT6A 10G BASE-T	26 AWG SPHSCA	PTFE, White (Laser Markable)	3.2 (4.8)	0.22 (5.59)	-55/+200°C	214 (65)
E6A3826	CAT6A 10G BASE-T	26 AWG SPHSCA	PTFE, White (Laser Markable)	3.3 (4.9)	0.22 (5.59)	-55/+200°C	214 (65)
E6A5826	CAT6A 10G BASE-T	26 AWG SPHSCA	PTFE, (White) Laser Markable	3.0 (4.5)	0.21 (5.33)	-55/+200°C	230 (70)
E74826	CAT7 10G BASE-T	26 AWG SPCA	ETFE, White (Laser Markable)	3.3 (4.9)	0.23 (5.84)	-55/+200°C	230 (70)

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*no maximum distance