GIGANEED

TECHNICAL DATASHEET

CAT 6A
INDUSTRIAL PLUG

Industrial shielded RJ45 plugs

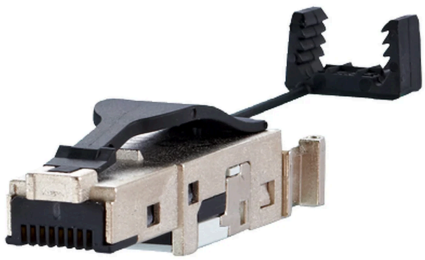
Field-installable plugs for 10 Gbit/s and PoE

CABLE TODAY · WONDERFUL TOMORROW

Cat 6A / Class EA | Shielded | Tool-free versions | PoE+ / UPoE | 10 Gbit/s | Industrial

OVERVIEW

GIGA-C6A-CON-IND brings together the GigaNeed industrial RJ45 plugs, made to be fitted on site in harsh environments. The tool-less Cat 6A plug takes solid and stranded 23–26 AWG conductors in UTP, FTP or STP cable, with a front protective cap and a clamp adjustable to the cable diameter. Two further shielded versions cover industrial Ethernet with a bend-protection boot and field assembly on cables up to 10.5 mm. All support 10 Gbit/s and PoE, PoE+ and UPoE.



Product image for illustration.

KEY SPECIFICATIONS

Category	Cat 6A, Class EA
Shielding	Fully shielded
Contacts	8
Data rate	10 Gbit/s (IEEE 802.3an)
Power	PoE, PoE+ (IEEE 802.3at), UPoE
Wiring	T568A or T568B
Colour	Black

TOOL-LESS CAT 6A PLUG

Conductor 23–26 AWG	Max. jacket Ø 9 mm	PoE current 1.5 A
Insulation resist. 500 MΩ	Retention 140 N	Durability 750 cycles

CAT 6A INDUSTRIAL PLUG GIGA-C6A-CON-IND

STANDARDS

- ISO/IEC 11801 · ISO/IEC 60603-7-51
- ANSI/TIA/EIA-568-B.2
- EN 50288-3 · EN 50173:2002 · EN 50167 · EN 50169
- IEEE 802.3at (PoE+) · IEEE 802.3an
- UL 1863 · RoHS

APPLICATIONS

- 10GBASE-T (10 Gbit/s)
- Industrial Ethernet
- PoE, PoE+ and UPoE devices
- 1000BASE-T (Gigabit Ethernet)
- Field termination without special tools

FREQUENCY PERFORMANCE

Frequency	SRL	Attenuation	NEXT	PS-NEXT
(MHz)	dB	dB/100 m	dB	dB
0.772	—	1.8	67.0	64.0
1	20.0	2.0	65.3	62.3
4	23.0	4.1	56.3	53.3
8	24.0	5.8	51.8	48.8
10	25.0	6.5	50.3	47.3
16	25.0	8.2	47.3	44.3
20	25.0	9.3	45.8	42.8
25	24.2	10.4	44.3	41.3
31.25	23.3	11.7	42.9	39.9
62.5	20.7	17.0	38.4	35.4
100	19.1	22.0	35.3	32.3
200	18.0	29.2	40.8	37.8
250	17.3	33.0	39.3	36.3
500	15.6	48.1	34.8	31.8

Values published by the manufacturer for the tool-less Cat 6A plug.

VERSIONS

Version	Conductor	Cable jacket	Notes
Tool-less Cat 6A	Solid & stranded 23–26 AWG	Up to Ø 9 mm	Zinc-plated bronze, −40/+68 °C
Industrial Class EA	AWG 27/7–24/7, 26/1–24/1	Up to Ø 7.3 mm	Bend protection, 43.3 × 13.9 × 15.7 mm
Cat 6A field plug	AWG 27/7–22/7, 26/1–22/1	Ø 5.5–10.5 mm	Zinc die-cast, IP20, 49.8 × 13.8 × 16.5 mm

Specifications may change without notice. Ref. GIGA-C6A-CON-IND.