

The GIGA-DOR Solution

Category 7, 100 Ohm, 600 MHz Data Transmission Cables



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The GIGA-DOR Solution

CAT 7 GIGA-DOR - Horizontal Overall Shielded Screened Twisted Pair (S/STP) Cables

TELDOR P/N	Teldor Brand Name	Construction	Overall Shield Type	Flame Test	Jacket Material	Cable Diameter (mm)	Cable Weight (kg/km)	NVP (%)
9928504XXX	GIGADOR	4 STP Pairs 22 AWG (S/STP)	Braid	IEC 60331.1 VW-1	PVC	8.7	78	75
9928554XXX	GIGADOR	4 STP Pairs 22 AWG (S/STP)	Braid	IEC 60331.1 VW-1	FR-LSZH (HFFR)	8.6	78	75
9928604XXX	GIGADOR Jr.	4 STP Pairs 23 AWG (S/STP)	Braid	IEC 60331.1 VW-1	PVC	8.4	70	75
9928654XXX	GIGADOR Jr.	4 STP Pairs 23 AWG (S/STP)	Braid	IEC 60331.1 VW-1	FR-LSZH (HFFR)	8.4	66.5	75
9928582XXX	GIGADOR Fig-8	8 STP Pairs 22 AWG (S/STP) FIG-8 (Siamese)	Braid	IEC 60331.1 VW-1	PVC	8.6x17.3	146	75
9928592XXX	GIGADOR Fig-8	8 STP Pairs 22 AWG (S/STP) FIG-8 (Siamese)	Braid	IEC 60331.1 VW-1	FR-LSZH (HFFR)	8.4x17	146	75
9928682XXX	GIGADOR Jr. Fig-8	8 STP Pairs 23 AWG (S/STP) FIG-8 (Siamese)	Braid	IEC 60331.1 VW-1	PVC	8.4x17.4	140	75
9928692XXX	GIGADOR Jr. Fig-8	8 STP Pairs 23 AWG (S/STP) FIG-8 (Siamese)	Braid	IEC 60331.1 VW-1	FR-LSZH (HFFR)	8.2x16.9	137	75

CAT 7 GIGA-PATCH - Overall Shielded Screened Twisted Pairs (S/STP) Cables

TELDOR P/N	Teldor Brand Name	Construction	Overall Shield Type	Flame Test	Jacket Material	Cable Diameter (mm)		NVP (%)
9928144XXX	GIGAPATCH	4 STP Pairs 26 AWG(S/STP)	Braid	IEC 60331.1 VW-1	PVC	6.1	44	78
9928244XXX	GIGAPATCH	4 STP Pairs 26 AWG(S/STP)	Braid	IEC 60331.1 VW-1	FR-LSZH (HFFR)	6.1	44	78

XXX= Jacket Color Code

The GIGA-DOR Solution Electrical Specifications

The GIGA-Solution cables are available with the following copper conductors

GIGADOR : 22 AWG (0.64 mm OD) / GIGADOR Junior : 23 AWG (0.58 mm OD) / GIGAPATCH: 26 AWG (7 X 0.16 mm OD)

22# GIGA-DOR HORIZONTAL CABLES

Frequency MHz.	Attenuation dB/100 m		NEXT Loss dB		Return Loss dB/100 m		Input Impedance (Ohm)	
	Specification	Cable Max.	Specification	Cable Min.	Specification	Cable Min.	Specification	Cable
1	N/A	N/A	78	85	20	21	100±15	100±12
4	3.7	3.3	78	85	23	24	100±15	100±12
10	5.9	5.2	78	85	25	27	100±15	100±12
16	7.4	6.9	78	85	25	27	100±15	100±12
20	8.3	7.5	78	85	25	27	100±15	100±12
30	10.2	9.5	78	85	23.8	25	100±15	100±12
31.25	10.4	9.6	78	85	23.6	25	100±15	100±12
62.5	14.9	14.0	75	82	21.5	23	100±15	100±12
100	19.0	17.6	72	79	20.1	22	100±15	100±12
125	21.4	20.0	71	78	19.4	22	100±22	100±12
200	27.5	25.5	68	75	18.0	20	100±22	100±12
250	31.0	29.0	66	75	17.3	19.5	100±22	100±12
300	34.2	31.5	65	75	16.8	19	100±25	100±12
600	50.1	48.0	61	72	14.7	17	100±25	100±12



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Cat 7, 100 Ohm, 600 MHz S/STP Horizontal Cables per IEC-61156-5

23# GIGA-DOR Junior HORIZONTAL CABLES

Frequency	Attenuation dB/100 m		NEXT Loss dB		Return Loss dB/100 m		Input Impedance (Ohm)	
	MHz.	Specification	Cable Max.	Specification	Cable Min.	Specification	Cable Min.	Specification
1	N/A	N/A	78	85	20	21	100±15	100±12
4	3.7	3.3	78	85	23	24	100±15	100±12
10	5.9	5.2	78	85	25	27	100±15	100±12
16	7.4	6.9	78	85	25	27	100±15	100±12
20	8.3	7.5	78	85	25	27	100±15	100±12
30	10.2	9.5	78	85	23.8	25	100±15	100±12
31.25	10.4	9.6	78	85	23.6	25	100±15	100±12
62.5	14.9	14.0	75	82	21.5	23	100±15	100±12
100	19.0	17.6	72	79	20.1	22	100±15	100±12
125	21.4	20.0	71	78	19.4	22	100±22	100±12
200	27.5	25.5	68	75	18.0	20	100±22	100±12
250	31.0	29.0	66	75	17.3	19.5	100±22	100±12
300	34.2	31.5	65	75	16.8	19	100±25	100±12
600	50.1	48.0	61	72	14.7	17	100±25	100±12

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26# GIGAPATCH CABLES

Frequency	Attenuation dB/100 m		NEXT Loss dB		Return Loss dB/100 m		Input Impedance (Ohm)	
	MHz.	Specification	Cable Max.	Specification	Cable Min.	Specification	Cable Min.	Specification
1	N/A	N/A	78	85	20	21	100±15	100±15
4	5.6	5.4	78	85	23	24	100±15	100±15
10	8.8	8.5	78	85	25	26	100±15	100±15
16	11.1	10.5	78	85	25	26	100±15	100±15
20	12.4	11.9	78	85	25	26	100±15	100±15
30	15.3	14.5	78	85	23.5	25	100±15	100±15
31.25	15.6	14.6	78	85	23.5	25	100±15	100±15
62.5	22.3	21.0	75	82	20.7	22	100±15	100±15
100	28.5	27.0	72	79	19.0	21	100±15	100±15
125	32.1	30.6	71	78	18.2	20	100±22	100±15
200	41.2	39.5	68	75	16.4	18.2	100±22	100±15
250	46.5	44.5	66	75	15.6	17.5	100±22	100±15
300	51.3	49.3	65	75	14.9	16.8	100±25	100±15
600	75.1	73.1	61	72	12.3	14.0	100±25	100±15

DC Resistance 22#	59 Ohm/Km max. @ 20° C.	Propagation Delay	4.5 nom. 4.7 max. nS/m @ 1 MHz.
DC Resistance 23#	82 Ohm/Km max. @ 20° C.		4.4 nom. 4.6 max. nS/m @ 10 MHz.
DC Resistance 26#	150 Ohm/Km max. @ 20° C.		4.4 nom. 4.6 max. nS/m @ 100-600 MHz.
Max. Resistance unbalance	3% max.	Propagation Delay Skew	8 nom. 15 max. nS/100m @ 10-600 MHz.
Characteristic Impedance	100 ± 15 Ohm @ 1-600 MHz.	Insulation Resistance	152 MegaOhm · Km min @ 500 Vdc, 20° C.
Capacitance	43 pF/m @ 1 KHz.	Dielectric Strength	700 Vac/1 minute min.
Capacitance Unbalance	1.5 pF/m max. @ 1 KHz.	Voltage rating:	60 V max.
Velocity of Propagation	79-80% nominal	Transfer Impedance	100 mOhm/m max @ 30 MHz.
		Coupling Attenuation:	90 db min. @ 30-1000 MHz.



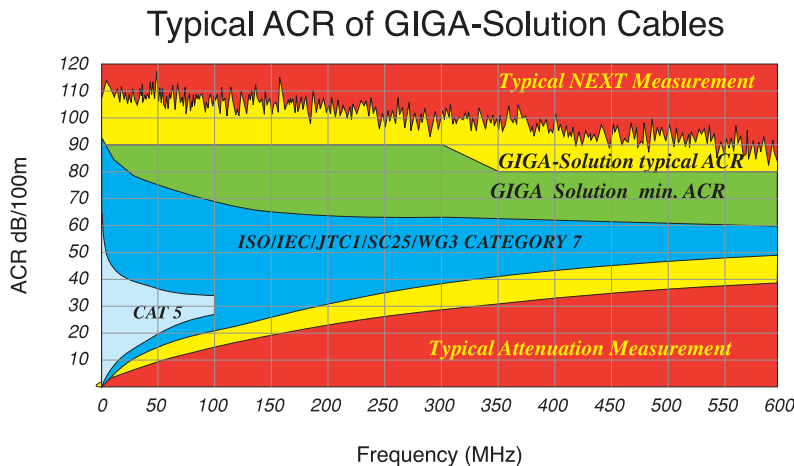
TELDOR... The Best Connection™



What is The GIGA-DOR Solution?

The **GIGA-DOR Solution** is a complete line of high-performance Cat 7 data cables, designed for CLASS F links and for future high data-rate networks, available in a wide range of constructions.

TELDOR's GIGA-DOR Solution cables conform to the ISO/IEC 11801 definition of Cat 7 cables as specified in IEC 61156-5 and 61156-6. These cables are composed of balanced twisted pairs having a nominal 100 Ohm characteristic impedance up to 600 MHz, with a very high NEXT loss.



The high NEXT loss, achieved by individual aluminum foil pair shields, provides a typical margin of 60 dB ACR over UTP cables, making the GIGA-Solution cables ideal for multiple high-frequency services.

GIGA-DOR & GIGA-DOR Jr. S/STP horizontal cables and **GIGA-Patch** 4 pair S/STP 26# work area (patch) cables are overall shielded with a tin-coated copper braid. When properly grounded, this copper braid and the individual aluminum foil shields provide exceptional EMC performance, having a minimum coupling attenuation of 90 dB.

All cables are available with flame-retardant PVC or halogen-free (HFFR) jackets, in a range of colors, in single or "Siamese" twin (FIG-8) constructions.

TELDOR Wires & Cables Ltd.,

TELDOR Wires & Cables Ltd. Is a leading ISO-9001:2000 certified manufacturer of Hi-Tech, sophisticated cables.

Our product range includes:

Audio frequency & microphone cables, High frequency coaxial, triaxial and twinaxial cables, Instrument & thermocouple extension cables, BUS cables, Power cables, Telecom and switchboard cables for both digital and analog applications, TelSec cables for perimeter intrusion detection and security applications, Digicom cables for ISDN and Digital Telecommunication Systems and Fiber Optic cables.

TELDOR'S LAN & data transmission cable range includes:

The BASIC-Solution: 100 MHz Category 5 & 5E Cables

The GIGA-STAR Solution: 250 MHz Category 6 Cables

The GIGA-DOR Solution: 600 MHz Category 7 Cables

The HI-GIGA Solution: 900 MHz Cables

The TERA-DOR Solution: 1200 MHz Cables

The FLEX-Solution: Patch, Jumpers and Work-area Cables.

The OPTILAN-Solution: Fiber Optic Cables for the Local Area Network

Please call us for more information on other products from our wide range of wires & cables.

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