DataLink 100e

Category 5e F/UTP 100 Ohm Modular Cords (Type L)

HES Cabling Systems
Connecting Networks™

Description

HCS DataLink 100e modular cord series consists of 100 Ohm impedance, 4-pair overall foil (F/UTP) shielded terminated cords for work area, jumper and patching in local area networks (LANs).
HCS DataLink 100e modular cords feature a unique termination method, combining strength relief injection molding into the RJ-45 plug with a removable boot. This design provides the advantages of both molded and non-molded terminations.
HCS DataLink 100e modular cords exceed all ANSI/TIA-568.2-D Category 5e and ISO/IEC-11801 (2nd Edition) requirements requirements in shielded cabling systems, and are specially designed to be backward compatible with all Category 5 jacks.
The HCS DataLink 100e modular cords can be used with either T568A or T568B modular jacks.
The standard color is Grey RAL 7035, but they are available in 10 different jacket colors and supplied with boots that match the color of the cord.

Applications

HCS DataLink 100e modular cords can be used for connections in telecommunications outlet, MUTO, consolidation point, patch panel and terminal equipment.
HCS DataLink 100e modular cords support all presently available LAN applications, including the following protocols:

- ☑ 1000BASE-T Gigabit Ethernet
- ☑ ATM 155
- ☑ TP-PMD
- ☑ 100BASE-T Fast Ethernet
- ☑ 100BASE-T2
- ☑ 100BASE-T4
- ☑ 100BASE-TX
- ☑ Token Ring 100 Mbps
- ☑ ATM 52
- ☑ ATM 25
- ☑ 10BASE-T Ethernet
- ☑ Token Ring 4 Mbps and 16 Mbps
- ☑ Broadband and Baseband Video
- ☑ ISDN Basic and Primary Access
- ☑ 1BASE-5 Starlan
- ☑ ISALAN
- ☑ ITU V.21 and X.11

Qualifications and Approvals

HCS DataLink 100e modular cords are tested and verified for full compliance with the following standards:

- ➔ Category 5e according to ANSI/TIA-568.2-D
- ➔ Category 5e according to ISO/IEC-11801 (2nd Edition)

Benefits & Features

- ➔ Testing every cord prior to shipment - Providing the highest degree of quality assurance.
- ➔ Unique double termination method - Providing the advantages of both molded and non-molded terminations.
- ➔ Exceptional material properties and cable design - Providing the highest degree of reliability.
- ➔ High Return Loss and NEXT Loss values - Providing low BER (Bit-Error-Rate) in all applications.
- ➔ Extremely high pair-balance - Providing excellent EMC (Electro Magnetic Compatibility), minimizing radiation and maximizing noise immunity.
- ➔ End-to-end shield continuity - Providing a low transfer impedance, a high coupling-attenuation and improved EMC.
- ➔ Revolutionary pair lay scheme - Providing an extremely low delay skew.
- ➔ Smooth and limp jacket - Providing comfortable cord handling.
- ➔ Unique DoubleSafe™ Quality Assurance Program - Providing lowest rejection rate available.

PHYSICAL AND MECHANICAL PROPERTIES

4 color-coded, unshielded twisted pairs cabled together, overall taped-wrapped with a polyester tape and an aluminum foil and overall jacketed. Both cable ends terminated with fully shielded modular plug connectors conforming to IEC 60603-7-3.

Basic Cable Conductor	Stranded, 26 AWG, 7x0.16 mm, bare annealed copper
Wire Insulation	Polyolefin
Number of Insulated Conductors	8, twisted in 4 pairs.
Color Code of Pairs	Blue x White/Blue, Orange x White/Orange, Green x White/Green, Brown x White/Brown.
Overall Tape Wrap	Polyester tape, providing 100% coverage.
Overall Shield	Polyester-aluminum foil (foil face in), providing 100% coverage.
Drain Wire	Stranded, 26 AWG, 7x0.16 mm, tinned-copper laid under the aluminum foil.
Outer Jacket and Boots	LSOH Halogen free flame retardant or PVC compound.
Standard Jacket and Boot Color	Light Gray RAL 7035. Other colors available upon request.
Standard Surface Marking	Includes HCS P/N, Cable Description, Meter Mark and Batch Number.
Cable to Plug Tensile Strength	9 Kgf (90N) min.
Pulling Force	1 Kgf (10N) max.
Storage Temperature	-20 to +80C
Durability	750 mating cycles
Cable OD	5.5 mm nom.
Bend Radius	22 mm min.
Plug Housing Material	Polycarbonate.
Plug Contact Material	50 micro-inches gold plating over 100 micro-inches nickel plated copper alloy.
Temperature Operating Range	-20 to +60C
Flame Test	IEC 60332-1.
Halogen Content in LSOH Cables	Null.

TRANSMISSION PROPERTIES AND ELECTRICAL SPECIFICATIONS

FREQ.	NEXT			RL
MHz	dB			dB
	Min			Min
	2 m Patch Cord	5 m Patch Cord	10 m Patch Cord	
1.00	65.0	65.0	65.0	19.8
4.00	62.3	61.5	60.4	21.6
8.00	56.4	55.6	54.7	22.5
10.00	54.5	53.7	52.8	22.8
16.00	50.4	49.8	48.9	23.4
20.00	48.6	47.9	47.1	23.7
25.00	46.7	46.0	45.3	24.0
31.25	44.8	44.2	43.6	23.0
62.50	39.0	38.5	38.1	20.0
100.00	35.1	34.8	34.6	18.0

Characteristic Impedance	100±6 Ohm @ 1-100 MHz
Contact Resistance	20 mOhm max.
Resistance Unbalance	2% max.
Voltage Rating	72 Vdc max.
Dielectric Strength	1000 Volts/1 minute min rms
Ampacity	0.5 Amps max.
Insulation Resistance	500 MOhm min. @ 500 Vdc
Coupling Attenuation	55 dB min @ 30-100 MHz

ORDERING INFORMATION

HCS P/N	Description	Length (m)	SR Color	Clip Color
T5E-00430-0579	4x2x26# F/UTP CAT 5e PVC Modular Cord Grey	0.5	Black	Purple
T5E-00440-0579	4x2x26# F/UTP CAT 5e LS0H Modular Cord Grey	0.5	Black	Purple
T5E-00430-1079	4x2x26# F/UTP CAT 5e PVC Modular Cord Grey	1.0	Black	Purple
T5E-00440-1079	4x2x26# F/UTP CAT 5e LS0H Modular Cord Grey	1.0	Black	Purple
T5E-00430-2079	4x2x26# F/UTP CAT 5e PVC Modular Cord Grey	2.0	Black	Purple
T5E-00440-2079	4x2x26# F/UTP CAT 5e LS0H Modular Cord Grey	2.0	Black	Purple
T5E-00430-3079	4x2x26# F/UTP CAT 5e PVC Modular Cord Grey	3.0	Black	Purple
T5E-00440-3079	4x2x26# F/UTP CAT 5e LS0H Modular Cord Grey	3.0	Black	Purple
T5E-00430-5079	4x2x26# F/UTP CAT 5e PVC Modular Cord Grey	5.0	Black	Purple
T5E-00440-5079	4x2x26# F/UTP CAT 5e LS0H Modular Cord Grey	5.0	Black	Purple
T5E-00430-7079	4x2x26# F/UTP CAT 5e PVC Modular Cord Grey	7.0	Black	Purple
T5E-00440-7079	4x2x26# F/UTP CAT 5e LS0H Modular Cord Grey	7.0	Black	Purple
T5E-00430-A079	4x2x26# F/UTP CAT 5e PVC Modular Cord Grey	10	Black	Purple
T5E-00440-A079	4x2x26# F/UTP CAT 5e LS0H Modular Cord Grey	10	Black	Purple

Note: Standard color: Light Gray RAL 7035. To define other colors and constructions use the Modular Cords P/N System Table.