

Description

HCS DataLink 250 28AWG CAT6 LSOH slim and thin modular cord series consists of 100 Ohm impedance, 4-pair U/UTP RJ45 terminated cords for work area, jumper and patching in tight locations such as high density cabinets in data-centers.

HCS CAT6 28AWG modular cords exceed all ANSI/TIA/568.2-D and ISO/IEC-11801 Category 6 requirements and they can be used with either T568A or T568B RJ45 jacks.

Applications

HCS DataLink 250 CAT6 28AWG modular cords support all relevant LAN applications, including the following protocols:

- 2.5GBASE-T & 5GBASE-T
- 1GBASE-T
- ATM 155
- TP-PMD
- 100BASE-T
- 100BASE-T2
- 100BASE-T4
- 100BASE-TX
- Token Ring 100 Mbps
- ATM 52
- ATM 25
- 10BASE-T Ethernet
- Broadband and Baseband Video
- ISDN Basic and Primary Access
- 1BASE-5 Starlan
- ITU V.21 and X.11



Qualifications and Approvals

HCS DataLink 250 CAT6 28AWG modular cords are retested and verified for full compliance with the following standards:

- Category 6 cord limits according to ANSI/TIA/568-2-D
- Category 6 cord limits according to ISO/IEC-11801

Benefits & Features

- Extremely low cable OD and slim form factor - Ideal for high-density panels and cabinets in data-centers.
- Testing every cord prior to shipment - Providing the highest degree of quality assurance.
- 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.
- Smooth and limp LSOH jacket - Providing comfortable cord handling and safety.
- Unique DoubleSafe™ Quality Assurance Program - Providing lowest rejection rate available.

PHYSICAL AND MECHANICAL PROPERTIES

4 color-coded, unshielded twisted pairs cabled together and overall jacketed. Both cable ends terminated with unshielded modular plug connectors conforming to IEC 60603-7-4.

Basic Cable Conductor	Stranded, 28 AWG, 7x0.12 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	None.
Overall Shield	None.
Drain wire	None.
Outer Jacket and Boots	LSOH Halogen free flame retardant 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	90N min.
Pulling Force	7N max.
Storage Temperature	-20 to +60C
Durability	1200 mating cycles
Cable OD	3.7±0.2 mm
Bend Radius	23 mm min.
Plug Housing Material	Polycarbonate, conforming to UL 94 V-0.
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.

Category 6 U/UTP 100 Ohm
28AWG Modular Cords (Type L)



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	65.0	65.0	65.0	21.6
8.00	65.0	65.0	65.0	22.5
10.00	65.0	65.0	62.9	22.8
16.00	62.0	60.5	59.0	23.4
20.00	60.1	58.6	57.2	23.7
25.00	58.1	56.8	55.4	24.0
31.25	56.2	54.9	53.6	23.0
62.50	50.4	49.2	48.1	20.0
100.00	46.4	45.3	44.4	18.0
125.00	44.5	43.5	42.7	17.0
150.00	43.0	42.1	41.4	16.2
200.00	40.6	39.8	39.3	15.0
250.00	38.8	38.1	37.6	14.0

Characteristic Impedance	100±6 Ohm @ 1-250 MHz
Contact Resistance	20 mOhm max.
Resistance Unbalance	2% max.
Voltage Rating	72 Vdc max.
Dielectric Strength	1000 Volts/1 minute min rms
Ampacity	1.0 Amps max.
Insulation Resistance	5000MOhm.m min. @ 500 Vdc
Coupling Attenuation	40 dB min @ 30-100 MHz 40-20log (f/100)@100-250 MHz
Transfer Impedance	N/A
DC Resistance (cable)	225 Ohm/km Max.

ORDERING INFORMATION

HCS P/N	Description	Length (m)	SR Color	Clip Color
T06-00490-0576	4x2x28# U/UTP CAT 6 LSOH Modular Cord Gray	0.5	Black	Red
T06-00490-1076	4x2x28# U/UTP CAT 6 LSOH Modular Cord Gray	1.0	Black	Red
T06-00490-2076	4x2x28# U/UTP CAT 6 LSOH Modular Cord Gray	2.0	Black	Red
T06-00490-3076	4x2x28# U/UTP CAT 6 LSOH Modular Cord Gray	3.0	Black	Red
T06-00490-5076	4x2x28# U/UTP CAT 6 LSOH Modular Cord Gray	5.0	Black	Red
T06-00490-7076	4x2x28# U/UTP CAT 6 LSOH Modular Cord Gray	7.0	Black	Red
T06-00490-A076	4x2x28# U/UTP CAT 6 LSOH Modular Cord Gray	10	Black	Red

Note: Other colors and constructions are available upon request.