

Description

HCS DataLink 500A 28AWG CAT 6A LSOH slim and thin modular cord series consists of 100 Ohm impedance, 4-pair S/FTP RJ45 terminated cords for work area, jumper and patching in tight locations such as high density cabinets in data-centers. HCS CAT6A 28AWG modular cords exceed all ANSI/TIA-568.2-D and ISO/IEC-11801 Category 6A requirements and they can be used with either T568A or T568B RJ45 jacks.

Applications

HCS DataLink 500A CAT6A 28AWG modular cords support all presently available and future LAN applications, including the following protocols:

- 10GBASE-T
- 2.5GBASE-T & 5GBASE-T
- 1000BASE-T
- 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
- ITU V.21 and X.11



Qualifications and Approvals

HCS DataLink 500A CAT6A 28AWG modular cords are tested and verified for full compliance with the following standards:

- Category 6A according to ANSI/TIA-568.2-D
- Category 6A 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.
- 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 and overall cable shield - Providing excellent alien crosstalk loss and noise immunity.
- 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, individually foil shielded twisted pairs cabled together, overall braid shielded and jacketed. Both cable ends terminated with shielded modular RJ45 plugs conforming to IEC 60603-7-5.

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.
Individual Pair Shield	Polyester-Aluminum foil, providing 100% coverage with 25% overlap, aluminum facing out.
Overall Shield	Tinned copper braid, 50% coverage, laid in close contact with the individual foil shields.
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	5.8±0.2mm
Bend Radius	25 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.

TRANSMISSION PROPERTIES AND ELECTRICAL SPECIFICATIONS

FREQ. MHz	Min. NEXT				Min RL
	dB				dB
	1 m cord	2 m cord	5 m cord	10 m cord	
1.0	65.0	65.0	65.0	65.0	19.8
4.0	65.0	65.0	65.0	65.0	21.6
8.0	65.0	65.0	65.0	64.8	22.5
10.0	65.0	65.0	64.5	63.0	22.8
16.0	62.7	62.0	60.5	59.1	23.4
20.0	60.7	60.1	58.7	57.3	23.7
25.0	58.8	58.2	56.8	55.4	24.0
31.25	56.9	56.3	54.9	53.6	23.0
62.5	51.0	50.4	49.2	48.1	20.0
100	47.0	46.4	45.4	44.5	18.0
200	41.1	40.7	39.9	39.3	15.0
250	39.3	38.9	38.1	37.7	14.0
300	36.4	36.2	35.9	35.8	12.8
400	31.8	31.9	32.1	32.5	10.9
500	28.2	28.4	29.0	29.8	9.5

Characteristic Impedance	100±6 Ohm @ 1-500 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	500 MOhm min. @ 500 Vdc
Coupling Attenuation	55 dB min @ 30-100 MHz 55-20log(f/100) @100-500 MHZ
Transfer Impedance	10mOhm/m max @1-10 MHZ 30 mOhm/m max @30 MHZ

ORDERING INFORMATION

HCS P/N	Description	Length (m)	SR Color	Clip Color
T6A-00490-0571	4x2x28# S/FTP CAT 6A LS0H Modular Cord Grey	0.5	Black	Blue
T6A-00490-1071	4x2x28# S/FTP CAT 6A LS0H Modular Cord Grey	1.0	Black	Blue
T6A-00490-2071	4x2x28# S/FTP CAT 6A LS0H Modular Cord Grey	2.0	Black	Blue
T6A-00490-3071	4x2x28# S/FTP CAT 6A LS0H Modular Cord Grey	3.0	Black	Blue
T6A-00490-5071	4x2x28# S/FTP CAT 6A LS0H Modular Cord Grey	5.0	Black	Blue
T6A-00490-7071	4x2x28# S/FTP CAT 6A LS0H Modular Cord Grey	7.0	Black	Blue
T6A-00490-A071	4x2x28# S/FTP CAT 6A LS0H Modular Cord Grey	10	Black	Blue

Note: Other colors and constructions are available upon request.