

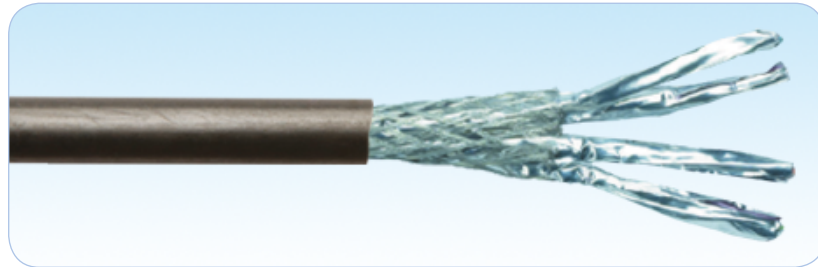
Description

HCS DataLink 500A outdoor cable series consists of 100 Ohm impedance, 4-pair S/FTP cables jacketed with heavy-duty, black, UV-resistant PE compound for horizontal outdoor installations in local area networks (LANs). All cables fully conform to and provide a substantial margin above all Category 6A requirements of ANSI/TIA-568.2-D and IEC 61156-5. All cables fully support all IEEE 802.3 PoE applications including Type 1, 2, 3 & 4, CISCO UPoE & UPoE+ and HDBase-T PoH.

Applications

HCS DataLink 500A Horizontal outdoor cables support all presently available and future LAN applications, including the following protocols:

- ☑ 10GBASE-T 10 Gigabit Ethernet
- ☑ 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 500A Cables are tested and verified for full compliance with the following standards:

- Category 6A ScTP according to ANSI/TIA-568.2-D
- Category 6A according to IEC 61156-5.

Benefits & Features

- Exceptional transmission properties - suitable for 10GBE applications on 100m channels.
- Testing every reel of cable prior to shipment - Providing the highest degree of quality assurance.
- Exceptional material properties and cable design - Providing a unique Century™ Lifetime Warranty.
- High ACR values - Providing low BER (Bit-Error-Rate) in all applications.
- Extremely high pair-balance and individual foil shields - Providing excellent EMC (Electro Magnetic Compatibility), minimizing radiation and maximizing noise immunity.
- Revolutionary pair lay scheme - Providing an extremely low delay skew.
- Heavy-duty, black, UV-resistant jacket - Providing low-cost outdoor cables for mild environments.
- Batch number printed every meter - Providing fast retrieval of test results from data-base.
- Unique DoubleSafe™ Quality Assurance Program - Providing lowest rejection rate available.

PHYSICAL AND MECHANICAL PROPERTIES

The cable contains 4 individually foil-shielded twisted pairs cabled together, overall shielded with a tinned-copper braid overall jacketed with black, UV resistant PE jacket for outdoor use in mild locations.

Basic Conductor	Solid, 23AWG, bare annealed copper
Insulation	SFS-PO
Number of Insulated Conductors	8, twisted in 4 pairs.
Color Code of Pairs	Blue x White, Orange x White, Green x White, Brown x White.
Individual Pair Shield	Aluminum foil, providing 100% coverage, foil face out.
Overall shield	Tin-coated copper wire braid.
Outer Jacket	Heavy-duty, UV-resistant PE compound for outdoor use.
Standard Jacket Color	Black RAL 9005.
Standard Surface Marking	Includes HCS P/N, Cable Description, Meter Mark and Batch Number.
Pulling Force	90 N/mm ² max.
Bend Radius	Dynamic: 8xD min. Static: 4xD min.
Storage Temperature	-20 to +60C
Temperature Operating Range	-30 to +60C
Conductor Size Test	UL 444

TRANSMISSION PROPERTIES AND ELECTRICAL SPECIFICATIONS

FREQ.	Insertion Loss	NEXT	PS NEXT	ACR-F	PS ACR-F	RL	Delay	TCL	ELTCTL	PS ANEXT	PS AACR-F
MHz	dB/100m	dB	dB	dB/100m	dB/100m	dB	nS/100m	dB	dB	dB	dB
	Max	Min	Min	Min	Min	Min	Max	Min	Min	Min	Min
1	2.0	74.3	72.3	67.8	64.8	20.0	570	40.0	35.0	67.0	67.0
10	5.9	59.3	57.3	47.8	44.8	25.0	545	40.0	15.0	67.0	58.2
30	10.2	52.1	50.1	38.3	35.3	23.8	541	35.2	5.5	67.0	48.7
62.5	14.9	47.4	45.4	31.9	28.9	21.5	539	32.0	NS	65.6	42.3
100	19.0	44.3	42.3	27.8	24.8	20.1	538	30.0	NS	62.5	38.2
250	31.0	38.3	36.3	19.8	16.8	17.3	536	26.0	NS	56.5	30.2
500	45.3	33.8	31.8	13.8	10.8	15.2	536	23.0	NS	52.0	24.2

Mean impedance	100±5 Ohm @ 1-500 MHz
Vp	75-77% nom.
Capacitance	40 pF/m nom @ 1 kHz
Capacitance unbalance to ground	1.6 pF/m max. @ 1 kHz
Insulation resistance	0.5 GOhm•km min.
DC resistance	77 Ohm/km max. (2% max. resistance unbalance).
DC loop resistance	154 Ohm/km max. (2% max. resistance unbalance).
Voltage rating	72Vdc max.
Coupling attenuation	IEC 61156-5 Type II.
Transfer impedance	IEC 61156-5 Grade 1.
Delay Skew	25 nS/100m max.

ORDERING INFORMATION

HCS P/N	Description	OD mm	Weight kg/km	Packaging	Notes
H6A-00469-BK	4x2x23# S/FTP CAT 6A Outdoor Black	9.5	74	305m Drum	-
H6A-00469-DP	4x2x23# S/FTP CAT 6A Outdoor Black	9.5	74	500m Drum	-
H6A-00469-DM	4x2x23# S/FTP CAT 6A Outdoor Black	9.5	74	1000m Drum	-