



Description

HCS DataLink 500A patented unshielded RJ45 tool-less keystone jack series includes high performance Category 6A snap-in 8-position/8-contact (8P8C) jacks conforming to IEC 60603-7-41 (unshielded 500 MHz connectors).

HCS DataLink 500A tool-less jacks are designed for fast and easy snap-in and out of wall plates, patch panels and surface box outlets.

HCS DataLink 500A tool-less jacks are available in 90° or 180° orientation.

All jacks fully conform to all ANSI/TIA-568.2-D and IEC 60603-7-41 component requirements, tested at the component level.

The HCS Logo and the DataLink 500A Trademark ensure long lasting high-performance and full support of all applications up to 10GBASE-T (10 Gigabit-Ethernet).

Applications

HCS DataLink 500A unshielded RJ45 tool-less keystone jacks are used in wall outlets, blank patch panels and surface box outlets.

P/N J6A-00853 has inherent AXT rejection and it can be used with all HCS panels, except 48-Port 1U panels (HD Panels).

P/N J6A-00856 can be used with HCS Staggered panel, P/N P00-02430-1U and 16-Ports panels in order to ensure CAT6A AXT compliance.

HCS DataLink 500A unshielded copper RJ45 tool-less keystone jacks fully support all presently available LAN applications up to up to 10GBASE-T, including the following protocols:

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|--|---|--|
| <input checked="" type="checkbox"/> 10GBASE-T 10 Gigabit Ethernet (IEEE 802.3an) | <input checked="" type="checkbox"/> 100BASE-T4 | <input checked="" type="checkbox"/> Token Ring 4 Mbps and 16 Mbps |
| <input checked="" type="checkbox"/> 1000BASE-T Gigabit Ethernet | <input checked="" type="checkbox"/> 100BASE-TX | <input checked="" type="checkbox"/> Broadband and Baseband Video |
| <input checked="" type="checkbox"/> ATM 155 | <input checked="" type="checkbox"/> Token Ring 100 Mbps | <input checked="" type="checkbox"/> ISDN Basic and Primary Access |
| <input checked="" type="checkbox"/> TP-PMD | <input checked="" type="checkbox"/> ATM 52 | <input checked="" type="checkbox"/> 1BASE-5 Starlan |
| <input checked="" type="checkbox"/> 100BASE-T Fast Ethernet | <input checked="" type="checkbox"/> ATM 25 | <input checked="" type="checkbox"/> ISALAN |
| <input checked="" type="checkbox"/> 100BASE-T2 | <input checked="" type="checkbox"/> 10BASE-T Ethernet | <input checked="" type="checkbox"/> ITU V.21 and X.11 |
| | | <input checked="" type="checkbox"/> IEEE 802.3 PoE Types 1, 2, 3 & 4 |

Qualifications and Approvals

HCS DataLink 500A unshielded RJ45 tool-less keystone jacks are supported by the Century™ Lifetime Warranty and by the DoubleSafe™ QA program as a part of complete HCS cabling system. All jacks are tested and verified at the component level and they comply with IEC 60603-7-41 (8-way, unshielded, free and fixed connectors, for data transmission with frequencies up to 500 MHz) and the following standards:

TRANSMISSION	EMC	SAFETY
<input checked="" type="checkbox"/> ANSI/TIA-568.2-D CAT6A	<input checked="" type="checkbox"/> EN-55022, Class B (Europa)	<input checked="" type="checkbox"/> UL94 V-0 rated plastic materials
<input checked="" type="checkbox"/> ISO/IEC 11801 Class Ea	<input checked="" type="checkbox"/> FCC Part 15, Subpart J, Class A (USA)	<input checked="" type="checkbox"/> UL listed as Communications-, Audio/Video-, Data- and Other Signaling-circuit Accessories
<input checked="" type="checkbox"/> IEC 60603-7-41 500MHz connector		<input checked="" type="checkbox"/> EU RoHS Directive

Benefits & Features

- Exceptional material properties and design - providing a unique Century™ Lifetime Warranty.
- Patented 90° or 180° design - providing easier access, better and faster wire connection.
- Detailed installation manual in English and Turkish - providing clear and comprehensive instructions.
- Exceeding Category 6A performance - providing full support to 10 Gigabit Ethernet.
- Robust and installer-friendly design - providing reduced installation and operating costs
- Compatible with 22-26 AWG solid or stranded conductors - providing support to a wider range of cabling types.
- Unique DoubleSafe™ Quality Assurance Program - providing lowest rejection rate available.

GENERAL PROPERTIES

Housing Material	High impact, Flame-retardant plastic compound, UL 94 V-0.
Jack Contacts Spring Material	High strength phosphor bronze alloy.
Jack Contacts Plating	1.27 µm (50µ") gold plating
IDC Contacts Material	High strength phosphor bronze alloy.
IDC Contacts Plating	2.3 µm (100µ") 100% Sn Alloy
Operating Environmental Conditions	0 to +60C at 5-95% RH (Non condensing)
Storage Environmental Conditions	-40 to +66C at 5-95% RH (Non condensing)
Packaging	50 or 100 units per box.
Plug to Jack Retention Force	49N min.
Plug to Jack Mating Force	9N max. for 8 wire jack.
Terminated Wire Retention Force	Axial pullout force: 9N min. Normal pullout force: 44N min
Insertion/Extraction Durability	750 mating cycles conforming to IEC 60603-7 Level A durability.
IDC Termination Durability	200 terminations min. acc to TIA/EIA 568B.2 requirements.
Conductor Compatibility Range	22 to 26 AWG, solid or stranded
Standard Color	White RAL 1013. Other colors available upon request.

TRANSMISSION AND ELECTRICAL SPECIFICATIONS (MATED)

FREQ.	Insertion Loss	NEXT	FEXT	RL	TCL	EL TCTL	PS ANEXT	PS AFEXT
MHz	dB	dB	dB	dB	dB	dB	dB	dB
	Max	Min	Min	Min	Min	Min	Min	Min
1.00	0.1	75.0	75.0	30.0	40.0	40.0	67.0	67.0
4.00	0.1	75.0	71.1	30.0	40.0	40.0	67.0	67.0
8.00	0.1	75.0	65.0	30.0	40.0	40.0	67.0	67.0
10.00	0.1	74.0	63.1	30.0	40.0	40.0	67.0	67.0
16.00	0.1	69.9	59.0	30.0	40.0	40.0	67.0	67.0
25.00	0.1	66.0	55.1	30.0	40.0	40.0	67.0	67.0
31.25	0.1	64.1	53.2	30.0	38.1	38.1	67.0	67.0
62.50	0.16	58.1	47.2	30.0	32.1	32.1	67.0	67.0
100.00	0.20	54.0	43.1	28.0	28.0	28.0	67.0	67.0
200.00	0.28	48.0	37.1	22.0	22.0	22.0	64.5	61.0
250.00	0.32	46.0	35.1	20.0	20.0	20.0	62.5	59.0
300.00	0.35	42.9	33.6	18.5	18.5	18.5	61.0	57.5
400.00	0.40	37.9	31.1	16.0	16.0	16.0	58.5	55.0
500.00	0.45	34.0	29.1	14.0	14.0	14.0	56.5	53.0

Propagation Delay	2.5 nS max @ 1-500 MHz
Propagation Delay Skew	1.25 nS max @ 1-500 MHz
Current Rating	1.5 A max.
Contact Resistance	20 mOhm max (per contact)
Input/Output Resistance	200 mOhm max
Input/Output Resistance Unbalance	50 mOhm max
Voltage Rating	72 Vdc max.
Dielectric Strength	1000 Volts rms for 1 minute
Insulation Resistance	500 MegaOhm min @ 1000 Vdc/1 minute
DC Resistance	0.1 Ohm max @ 20C
Coupling Attenuation	35 dB @ 30 - 100 MHz 35-20log(f/100) dB @ 100 - 1000 MHz

ORDERING INFORMATION

HCS P/N	Description	Blocks	T568
J6A-00853	8P8C RJ45 Unshielded Tool-Less 180° Category 6A Keystone Jack	TL IDC	UNI
J6A-00856	8P8C RJ45 Unshielded Tool-Less 90° Category 6A Keystone Jack	TL IDC	UNI