

Hybrid cable Cat.6 cable U/UTP 4 pairs + 4xSMT OS2, LSZH Indoor, Cca (B2Ca), (SCS6U + LIIN25)

Category 6 U/UTP 4 pairs + 4xSMT OS2, LSZH, Cca (B2Ca), Indoor.

SCA34642A0CCA, Rev.00, Date 2020-11-17



Standards of reference and applications

Indoor LAN horizontal cabling (max. 90m)

EIA/TIA 568-C.2, ISO/IEC 11801, IEC60794

Installation Features

Store at: -0 to +50 °C

Install at: -0 to +50 °C. **Bending radius minimum:** 80 mm (diam. 160 mm). **Pull maximum:** 100 N.

Operate at: -20 to +60 °C. **Bending radius minimum:** 125 mm (diam 250 mm).

Design

(Cat.6 U/UTP)

Conductor: solid bare copper AWG23 (0.55 mm nom.)

Insulation: polyethylene Ø 1.00 mm (nom.)

Pair: 2 insulated conductors stranded together

Central cross: 4 pairs assembled together around a PE central cross

Outer Jacket: grey, fire retardant LSZH

Color code:

1. White – White/blue
2. White – White/orange
3. White – White/green
4. White – White/brown

(4xSMT OS2)

Optic fiber: single mode OS2

Secondary coating: tight 900 µm, dyed

Structure: 4 fibers per revolution
Pulling element: aramid fibers
Outer Jacket: yellow/grey, fire retardant LSZH (nom. Ø 4,5/6,5mm)
Color code: 1. Blue, 2. White, 3. Yellow, 4. Green

Outer diameter: 6,5 x 14,1 mm (nom.)
Marking: APS – SCA34642A0CCA – CAT.6 U/UTP 4 PR AWG 23/1 + 4xSMT OS2 – LSZH Cca – Hybrid Cable – lot no. – w/y – xxx m

Environmental properties and Fire Performances

CPR Class: Cca-S1b,do,a3 (B2ca-S1b,do,a3)
Declaration of Performance: SCA34642A0CCA-001
Flame retardant: IEC60332-1, IEC60332-3
RoHS: 2011/65/EU
REACH: EC 1907/2006

Electrical characteristics

(CAT.6 U/UTP)
Conductor resistance: ≤ 95 Ω/km
Insulation resistance: ≥ 5000 MOhm/km
Mutual capacitance: ≤ 56 pF/m
Capacitance unbalance pair/pair: ≤ 330 pF/100m
Average characteristic impedance: 100 ± 15 Ω @ 1-250MHz
Velocity of propagation (NVP): 69%
Voltage (max): 75V (DC)

(4xSMT OS2)
Attenuation: ≤ 0,4 @1310 nm (dB/km), ≤ 0,3 @1550 nm
Mode field diameter: 9,2 ± 0,4 µm @1310 nm, 10.4±0.5 µm @1550 nm
Cladding non-circularity: ≤ 0,7 %
Cladding diameter: 124,8 ± 0,7 µm
Cladding non-circularity ??: ≤ 1 %
Coating diameter: 245 ± 5 µm

Frequency (MHz) :	1	4	8	10	16	20	25	31.25	62,5	100
Return Loss	20.0	23.0	24.5	25.0	25.0	25.0	24.3	23.6	21.5	20.1
Attenuation (dB/100m)	2.2	4.0	5.5	6.2	7.8	8.7	9.7	10.9	15.6	20.0
NEXT (dB)	74.3	66.3	61.8	60.3	57.2	55.8	54.3	52.9	48.4	45.3
PS-NEXT (dB)	72.3	63.3	58.8	57.3	54.2	52.8	51.3	49.9	45.4	42.3
ELFEXT (dB/100m)	67.8	56.0	49.9	48.0	43.9	42.0	40.0	38.1	32.1	28.0
PS-ELFEXT (dB/100m)	64.8	53.0	46.9	45.0	40.9	39.0	37.0	35.1	29.1	25.0

Ordering and delivery information

Pair count	P/N	O.D. [mm]	Weight [kg/km]	Retail packaging	Wholesale packaging	STK Electrical No.	GTIN
4 pairs + 4xSMT OS2	SCA34642A0CCA	6,5 x 14,1 (nom.)	90	500 m (drum) 50x20x30 mm 47 kg	6 000 m (pallet) 100x100x110 cm 484 kg	02 331 00	6410002331004

Recommended connectivity

	APS		Kerman		System warranty
Keystone jack (tool type)	-	-	GT6	72 093 16	included
Keystone jack (toolless)	-	-	CM6	72 094 39	not included
Keystone jack (toolless)	GSCAT6AU	72 058 68	-	-	included
Patch panel	PPE24SU	72 265 11	KRM24H	72 094 07	included
Field connector RJ45 (toolless)	AKLRJ456U	72 493 26	KRJ45U-U	72 477 00	not included

	APS		Kerman		System warranty
Connection box (tool type)	AKJ6U	72 493 27	KRM6KJ	72 473 16	not included
Häntäkuitu SC/UPC OS2		SCOS21-1			included
Häntäkuitu SC/APC OS2		SCAOS21-1			included
Häntäkuitu LC/UPC OS2		LCOS21-1			included
Häntäkuitu LC/APC OS2		LCAOS21-1			included

Extended system warranty

The APS System Warranty assures the compliance of the system performance to the applicable class of cabling for a period of 25 years. The warranty may be applied for by an accredited APS Partner who has designed and/or installed the entire system.

[Read more.](#)