

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

Category 6 U/UTP 4 pairs + 4xSMT OS2, LSZH, Dca, Indoor.

SCA34642A0, Rev.00, Date 2020-11-13



### Description



### 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:** 75 mm (diam. 150 mm). **Pull maximum:** 100 N.

**Operate at:** -20 to +60 °C. **Bending radius minimum:** 120 mm (diam 240 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

**Tight coating:** 900 µm, color coded

**Core:** 4 fibers

**Pulling element:** aramid fibers

**Outer Jacket:** yellow/grey, fire retardant LSZH (nom. Ø 4,5/6,2mm)

**Color code:** 1. Blue, 2. White, 3. Yellow, 4. Green

**Outer diameter:** 6,2 x 13,5 mm (nom.)

**Marking:** APS – SCA34642A0 – CAT.6 U/UTP 4 PR AWG 23/1 + 4xSMT OS2 – LSZH Dca – Hybrid Cable – lot no. – w/y – xxx m

## Environmental properties and Fire Performances

**CPR Class:** Dca-s2,d2,a1

**Declaration of Performance:** SCA34642A0-001

**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	SCA34642A0	6.2 x 13.5 (nom.)	76	500 m (drum) 50x20x30 mm 40.0 kg	6 000 m (pallet) 100x100x110 cm 403 kg	02 078 04	6410002078046

## 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

	APS		Kerman		System warranty
Field connector RJ45 (toolless)	AKLRJ456U	72 493 26	KRJ45U-U	72 477 00	not included
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.](#)