

UTP (U/UTP) cable 4x2xAWG24, Category 5E, 300 MHz

Euroclass E_{ca}

P/N: 799053-Eca



features

- complies with the Construction Products Regulation (CPR) EU No. 305/2011 and reaction to fire requirements according to the harmonized standards EN 50575: 2014+A1: 2016
- unshielded cable with PVC sheath
- enables transmission of all high-speed protocols up to 1000BASE-T
- tested in bandwidth up to 300 MHz
- enables RJ45 connectors to be mounted directly to a cable

application

- primary (Campus), secondary (Riser), tertiary (Horizontal)
- IEEE 802.3: 10BASE-T; 100BASE-TX; 1000BASE-T
- IEEE 802.5 16 MB; ISDN; TPDDI; ATM

construction

Conductor	bare copper wire, AWG24
Insulation	polyethylene, Ø 0,9 mm
Twisting	2 cores to the pair
Cable lay up	4 pairs to the core
Sheath	gray RAL7035
Outer cable diameter	5,0 mm

reaction to fire and fire safety

Reaction to fire	E _{ca}	
Fire safety	flame retardancy	IEC 60332-1-2
	smoke performance	-
	halogen acidity	-

mechanical properties

Min. bending radius	installation	40 mm
	operation	20 mm
Temperature range	installation	0 °C to +50 °C
	operation	-20 °C to +60 °C
Max. tensile load	100 N (10 kg)	
Cable weight (netto)	32 kg / km	

electrical properties at 20°C

Conductor resistance	-	$\leq 11,5 \Omega / 100 \text{ m}$
Resistance unbalance	-	$\leq 2\%$
Insulation resistance	(500V)	$\geq 5000 \text{ M}\Omega \times \text{km}$
Capacity	at 800 Hz	nom. $\leq 5,6 \text{ nF} / 100 \text{ m}$
Capacity unbalance	(pair/ground)	$\leq 1500 \text{ pF} / \text{km}$
Characteristic impedance	at 100 MHz	$(100 \pm 5) \Omega$
Nominal velocity of propagation (NVP)	-	cca 69%
Propagation delay	at 100 MHz	$\leq 538 \text{ ns} / 100 \text{ m}$
Delay skew	at 1.0 MHz - 100 MHz	$\leq 20 \text{ ns} / 100 \text{ m}$
Test voltage	(DC, 1 min) core/core;	1000 V
Coupling attenuation	-	$\geq 40 \text{ dB}$

Transmission properties at 20°C

f (MHz)	Attenuation (dB/100m) max.	NEXT (dB)	PS-NEXT (dB)	ACR (dB/100m)	PS-ACR (dB/100m)	ELFEXT (dB/100m)	PS-ELFEXT (dB/100m)	Return loss (dB)
1	1,9	71	68	69,1	66,1	68	65	20
4	3,7	62	59	58,3	55,3	56	53	23
10	6	56	53	50	47	48	45	25
16	7,6	53	50	45,4	42,4	44	41	25
20	8,5	51	48	42,5	39,5	42	39	25
31,2	10,7	49	46	38,3	35,3	38	35	24
62,5	15,7	44	41	28,3	25,3	32	29	22
100	19,8	41	38	21,2	18,2	28	25	20
125	22,3	40	37	17,7	14,7	26	23	19
155,5	24,2	38	35	13,8	10,8	24	21	
175	25,7	37	34	11,3	8,3	23	20	
200	27,5	36	33	8,5	5,5	22	19	
250	29,2	35	32	5,8	2,8	20	17	
300	32,0	34	31	2,0	-1,0	16	13	



This product is certified on a component level by 3P international independent laboratories according to ISO/IEC 11801:2011 (Ed.2.2), IEC 61156-5(Ed.2) Amd.1, EN 50173-1:2011, EN 50288-3-1:2013, ANSI/TIA 568-C.2, IEC 60332-1-2.

Mass production of this product is under permanent supervision of third party international laboratories performing 3P SURVEILLANCE maintenance testing and quality assurance sites.



The determination of Reaction to Fire Class Performance of this cable has been performed by Product Certification Body notified by European Commission.