



TECHNICAL DATA SHEET

1885ENH 'CAT 7' ISTP FRNC

vers V1
date 01-08-2007
page 1/2

APPLICATION

General according to ISO/IEC 11801 and EN50173.
Horizontal and building backbone cable.

CONSTRUCTION

CAT 7 ISTP cable (characterised up to 1000 MHz), with 4 twisted pairs with 23 AWG solid bare copper conductors and foamskin insulation, all 4 pairs individually shielded. Overall a braid. Jacket of flame retardant halogen free material.

REQUIREMENTS AND TEST METHODS

(All measurements and measurement methods according to IEC 1156-3 and prEN50288-4-1)

Cable construction and dimensions

- Conductor
 - Material Solid bare copper ETP
 - Dimension conductor 0.55 mm
 - Conductor insulation material Foamskin polyethylene
 - Diameter over insulated conductor 1.4 mm
- Colour code
 - Pair 1 White/Blue
 - Pair 2 White/Orange
 - Pair 3 White/Green
 - Pair 4 White/Brown
- Foil
 - Material Aluminium/polyester
- Braid
 - Material Tinned copper wires
 - Coverage > 40 %
 - Position braid Over foil
- Sheath
 - Material Flame retardant halogen free
 - Diameter over sheath 7.4 ± 0.25 mm
 - Ripcord Under sheath

Electrical characteristics

Conductor loop resistance	< 30 Ohm/100m
Conductor resistance unbalance	≤ 2 %
Dielectric strength	
conductor-conductor (1 min)	1 kV d.c.
conductor-screen (2 sec)	2.5 kV d.c
Insulation resistance	≥ 500 MOhm.km
Capacitance unbalance to earth	≤ 1600 pF/km
Nominal velocity of propagation (NVP)	Typical 0.75 c
Propagation delay difference (skew) (100 MHz)	≤ 40 ns/100m

**TECHNICAL DATA SHEET**vers **V1**
date **01-08-2007**
page **2/2****1885ENH 'CAT 7' ISTD FRNC**

Longitudinal attenuation (maximum values)

Frequency	1	4	10	16	20	31.2	62.5	100	155	200	300	600	MHz
Maximum	2.1	3.9	6.0	7.6	8.5	10.6	15	19	24	27	33	50	dB/ 100m

Near-end crosstalk (NEXT)

Frequency	1	4	10	16	20	31.2	62.5	100	155	200	300	600	MHz
Minimum	80	80	80	80	80	80	75	71	68	66	64	60	dB
Typical	95	95	95	94	93	91	88	85	83	80	75	68	dB

Input impedance

1-300 MHz 100 ± 15 Ohm300-600 MHz 100 ± 25 Ohm

Transfer impedance

1 MHz ≤ 10 mOhm/m10 MHz ≤ 10 mOhm/mScreening attenuation up to 600 MHz ≥ 55 dB**Environmental and overall characteristics**Temperature range $-20^{\circ}\text{C} - +60^{\circ}\text{C}$

Total weight (typical) 56 kg/km

Maximum operating voltage 48 V rms

Maximum cont. current per conductor (25°C) 1.0 A

Flame propagation IEC 332-1

Burning load 450 kJ/m