



Cable 100 MHz 25 PAIRS LSZH sheath
U/UTP cat. 5e+

FIBRAIN DATA cabling Express series is fully complied to requirements of category 5e (class D) according to the norm ISO/IEC 11801 2nd edition: 2002. Moreover all channel's components are complied to Directive ROHS 2002/95/WE.

Electrical and construction parameters:

Parameter		
Resistance(max) Ohm/100 m(328 ft) @ 20 °C		8,90
Pojemnošć (max)Mutual capacitance (max)		5,20
Nominal velocity of propagation NVP (% speed of light)		68
Impedence characteristic (Ohm)		(min-max)
Values at:	772 kHz	87-117
	1,0-100 MHz	85-115
Return loss (RL) dB (min)		
Values at:	1.0 - 10 MHz	20+5 log(f)
	10 - 20 MHz	25
	20 - 100 MHz	25-7 log(f/20)
Propagation delay (max) (ns @ 10 MHz)		518
Delay skew (max) (ns/100 m)		45
Diameter (mm)		12
Weight (kg/km)		213,7
Minimal bending radius (mm)		52
Installation temperature (°C)		-10/+50
Operation temperature (°C)		0/+50

Applications:

- 10BASE-T (IEEE 802.3)
- 4/16 Mbps Token Ring (IEEE 802.5)
- 100BASE-VG-AnyLAN
- 100 Mbps TP-PMD (ANSI X3T9.5)
- 100BASE-T (IEEE 802.3)
- 55/155 Mbps ATM
- 1000BASE-T (Gigabit Ethernet)

Norms:

- LSZH: EN 61034, EN 50267-2-1
- EN 60332-1, EN 60332-3-24
- ANSI/TIA/EIA 568-C.2 (Cat. 5e)
- ISO/IEC 11801
- IEC 61156-5
- EN 50173, EN 50288

Cable marking:

Every cable meter is marked as follow:

- **Brand:** FIBRAIN DATA
- **Cable type:** F/UTP 4PR OUTDOOR 24 AWG CAT. 5E 125 MHz
- **Sheath type:** PE PVC
- **Norms:** IEC 61156-5 ISO/IEC 11801 EN 50173
- **Production year:** XXXX
- **Identifier:** XXXXXX
- **Length mark in meters**

Construction:

- Conductor - 24AWG (0,51mm)
- Insulation - polyolefin
- Pair number - 25 pairs twisted
- Sheath - green LSZH

Pair 1-5	Pair 6-10	Pair 11-15	Pair 16-20	Para 21-25		
Frequency Mhz:	Attenuation Max dB/100 m:	NEXT	PS-NEXT	ACR-F	PS-ACR-F	Return Loss
		dB/100 m(min):				
1	2,0	65,3	62,3	61,0	58,0	20,0
4	4,1	56,3	53,3	49,0	46,0	23,0
8	5,8	51,3	48,3	42,0	39,9	24,5
10	6,5	50,3	47,3	41,0	38,0	25,0
16	8,2	47,3	44,3	36,9	33,9	25,0
20	9,3	45,3	42,3	34,9	31,9	25,0
25	10,4	44,3	41,3	33,0	30,0	24,3
31,25	11,7	42,9	39,9	31,0	28,0	23,6
62,5	17,0	38,4	35,4	25,1	22,1	21,5
100	22,0	35,3	32,3	21,0	18,0	20,1

XE125.107 FIBRAIN DATA Express 25xU/UTP Cat.5e+ 100 MHz reel of 1000 m, green LSZH sheath