

## Data Sheet

### EmiterNet PE UTP (U/UTP) Cat.5e outdoor gel-filled cable, code: K/EMITERNET-UTP5EOut-GEL.

#### Description and Technical Characteristics of the Product:

Category 5e four-pair unshielded cable is designed for ICT data transmission systems.

The cable design is based on 4 pairs of wires (the strands are made of pure copper) twisted together in such a way as to reduce near-end crosstalk. Thus, using this cable, it is possible to achieve a GigabitEthernet connection.

The outer sleeving of the cable is made of weather-resistant PE polyethylene. The inner core is filled with hydrophobic gel to ensure the cable's resistance to longitudinal water penetration.

Thanks to the combination of polyethylene insulation and gel filling, the cable can be laid directly in the ground.

The cable has 4 pairs of colour-coded wires.

The manufacturer's designation is printed on the cable, as well as standards compliance and length marking (EmiterNet -HN UTP Cat.5e PE+GEL 24AWG x 4PR outdoor, Verified to EN/PL 50173 ISO/IEC 11801 EIA/TIA 568-C.2 MM/YY xxxm).



#### Technical parameters:

Outer diameter of the cable	5.2mm +/- 0.5mm
Diameter of a single strand	0.5mm; 24 AWG
Outer insulation of the cable	PE
Colour of external insulation	Black
Strand insulation	PE
Strands	single-wire copper
Core	hydrophobic gel
Wave impedance	100Ω +/- 15Ω for 1–100MHz
Resistance of any pair for DC voltage	95Ω/km
NVP	62.00%
Insulation resistance of any strand (min)	150MΩ/km
Mutual capacitance of any pair (f=1kHz)	330pF/100m
Bending radius when laying	50mm
Bending radius during operation	25mm
Operating temperature	-40°C - +70 °C
Temperature during laying	0°C - +50 °C
Weight	38.7 kg/km
Packaging	305m drum

## Data Sheet

Parameters				
<b>Dynamic parameters:</b>				
<i>Frequency</i>	<i>Return Loss</i>	<i>Attenuation</i>	<i>NEXT</i>	<i>ACR</i>
(MHz)	(dB)	(dB/100m)	(dB)	(dB)
0.772	19.4	1.8	67.0	65
1	20.0	2.0	65.3	63
4	23.0	4.1	56.3	52
8	24.5	5.8	51.8	46
10	25.0	6.5	50.3	44
16	25.0	8.2	47.3	39
20	25.0	9.3	45.8	37
25	24.3	10.4	44.3	34
31.25	23.6	11.7	42.9	31
62.5	21.5	17.0	38.4	21
100	20.1	22.0	35.3	13
<i>Frequency</i>	<i>PSNEXT</i>	<i>ELFEXT</i>	<i>PSELFEXT</i>	<i>Delay</i>
(MHz)	(dB)	(dB/100m)	(dB/100m)	(ns/100m)
0.772	64.0	66.0	63.0	575.0
1	62.3	63.8	60.8	570.0
4	53.3	51.7	48.7	552.0
8	48.8	45.7	42.7	546.7
10	47.3	43.8	40.8	545.4
16	44.3	39.7	36.7	543.0
20	42.8	37.7	34.7	542.0
25	41.3	35.8	32.8	541.2
31.25	39.9	33.9	30.9	540.4
62.5	35.4	27.8	24.8	538.6
100	32.3	23.8	20.8	537.6

**Standards compliance:** EIA/TIA 568-C.2, EIA/TIA 568-B.2, ISO/IEC 11801, PN-EN50173

Product warranty 5 years from the date of purchase.

**Attention:**

**The cable is not dedicated to making certified networks!**

We have made every effort to ensure that the information presented is accurate and complete. However, we are not responsible for the accuracy and completeness of the data and, in particular, we cannot guarantee that this specification does not contain errors or mistakes. The information contained in this specification may be changed at any time without notice.