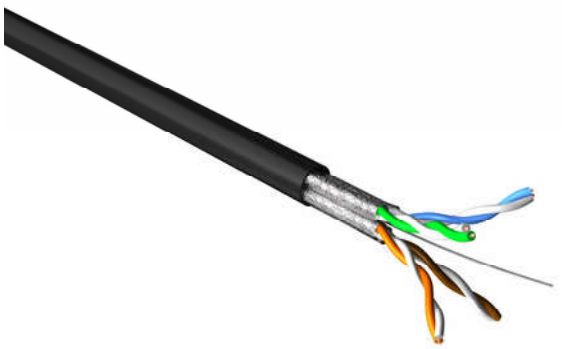
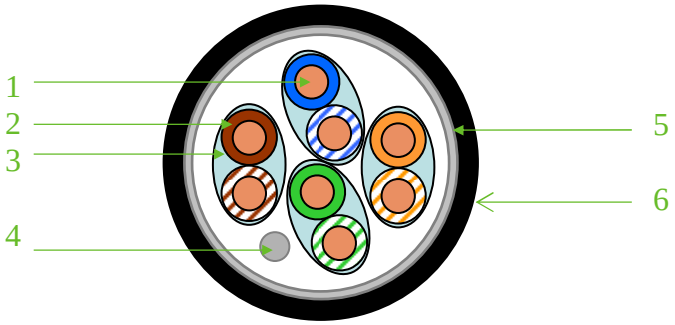
Data Sheet 1/2

10/12 TM Ed.4

REF : 5254SHINOUT

100 Ω U/FTP 4 pairs cable Category 6a LSZH –INT / EXT





1. **Conductor** : Solid bare copper AWG23
2. **Insulation** : PE Skin-Foam-Skin
3. **Individual shield of pairs:** Aluminium / Polyester foil ; coverage ≥100%
4. **Drain wire** : Solid tinned copper conductor
5. **Overall foil:** Polyester foil, coverage ≥ 100%
6. **Outer jaket** : LSZH –Black

Applications

PIMF (Pair In Metallic foil) data cable used in full shielded structured cabling system, for horizontal or vertical (backbone) configuration.

Its performances exceed the limits required by current standards thanks to its excellent high-speed and error free transmission up to 525 Mhz. It constitutes an investment for the future network applications.

This cable is used for digital and analogue voice, data and video signals transmission.

This cable can transmit :

- ISDN - RNIS
- TOKEN RING 4/16 Mbits
- 100 VG-AnyLAN
- TP-PMD/TP-DDI
- ATM 155, 622 Mbits/s and 1,2Gbits
- ETHERNET 10 Base T
- ETHERNET 100 Base Tx, 100 Base T4
- ETHERNET 1000 Base T – GIGABIT Ethernet
- IEEE 802.3 af – PoE (Power Over Ethernet) and DRAFT 4.2 IEEE 802.3 at - PoE+
- 10 GIGABIT ETHERNET (Up to 100 m)

This cable is suitable for indoor but also outdoor use, in static applications.
Its black outer jacket is made of a special LSZH compound which offers a good resistance to UV, ozone and humidity.
It can be used for all outdoor applications, excepted full immersion and direct burial.

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Data Sheet 2/2

10/12 TM Ed.4

REF : 5254SHINOUT

100 Ω U/FTP 4 pairs cable Category 6a LSZH –INT / EXT

Standards

CABLE	IEC 61156-5 Cat6a
SYSTEM	ISO/IEC 11801 CLASS Ea

Electrical properties

Max. electrical resistance of conductors : 95 Ω / Km
Insulation resistance ≥ 5000 MΩ. Km
Mutual capacitance (nom.) : 50 pF / m
Characteristic impedance: 100 Ω
Velocity of propagation : 79 %

Physical characteristics

Flame retardant : IEC 60332-1 & NF C 32070 C2
Operating temperature : - 20° C / + 70°C
Minimum bending radius: 8 x cable diameter
LSZH properties: Halogen rate and corrosiveness of combustion gas according to IEC 60754-1 and IEC60754-2 Smoke density according to IEC 61034-1 and 61034-2
RoHS compliance

External environment resistance

Weatherproof cable (resistance to rain, sun rays, moisture)
Resistance to moisture according to CEI20-34 : < 1.6mg/cm^2
Ozone resistance in compliance with ASTM D-470
UV resistance according to IEC 60068-2-5 : 4,1 kJ/ cm^2

Transmission performances

Freq (MHZ)	ATTENUATION (dB/100m)		NEXT (dB)		PS NEXT (dB)		ELFLEXT (dB)		PSELFEXT (dB)		RETURN LOSS (dB)	
	Standard	M.M.C	Standard	M.M.C	Standard	M.M.C	Standard	M.M.C	Standard	M.M.C	Standard	M.M.C
4	3.8	**3.7**	66.3	**67**	63.3	**64**	55.9	**66**	52.9	**63**	23.0	**25**
10	5.93	**5.8**	60.3	**62**	57.3	**59**	48	**63**	45	**60**	25.0	**27**
16	7.49	**7.3**	57.2	**59**	54.2	**56**	43.9	**62**	40.9	**59**	25.0	**27**
25	9.38	**9.2**	54.3	**56**	51.3	**53**	40	**57**	37	**54**	24.3	**27**
31.25	10.5	**10**	52.9	**55**	49.9	**52**	37.9	**52**	35.1	**49**	23.6	**25**
100	19.14	**18.8**	45.3	**47**	42.3	**44**	28	**44**	25	**41**	20.1	**22**
200	27.58	**27**	40.8	**43**	37.8	**40**	22	**35**	19	**32**	18	**20**
250	31.07	**30.**	39.3	**42**	36.3	**39**	20.0	**29**	17.0	**26**	17.3	**19**
300	34.27	**34**	38.1	**40**	35.1	**37**	18.4	**27**	15.4	**24**	17.3	**18**
400	40.05	**39**	36.3	**38**	33.3	**35**	16	**26**	13	**23**	17.3	**17.8**
500	45.26	**44.8**	34.8	**37**	31.8	**34**	14	**26**	11	**23**	17.3	**17.5**
525	NA(*)	**45.0**	NA	**36**	NA	**33**	NA	**22**	NA	**19**	NA	**17**

Standard values at 20°C according to IEC 61156-5 / Cat6A;
(*) NA: not applicable

Ordering information

Reference	**5254SHINOUT**
Pairs nb	4
AWG	23
Outer diameter (mm)	7.3
Weight (Kg/Km)	58
Conditioning	500m & 1000m drums

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