# Data Sheet 1/2

Ed. 3

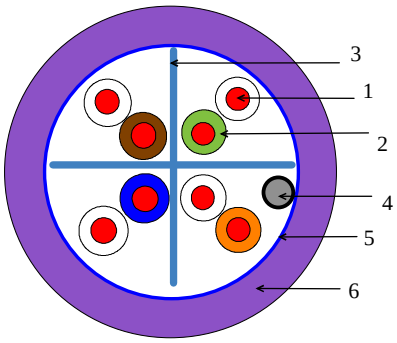
TM 01/13

# REF : FU510xSH

Cable 100 Ω F/UTP 4&8 pairs category 6A 500 MHz - LSZH

FU5104SH






1. **Conductor**: Solid bare copper AWG23
2. **Insulation** : Polyethylene
3. **Central cross:** Transparent or white thermoplastic cross
4. **Drain wire** : Solid tinned copper
5. **General shielding**: Aluminium/Polyester tape; coverage: 100%
6. **Outer jacket**: LSZH – Purple RAL 4001

## Application

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

It 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 4.0 IEEE 802.3 at - future PoE+
- 10 GIGABIT ETHERNET (Up to 100 m)

## Standards

| | |
|---|---|
| **CABLE** | IEC 61156-5 CAT 6A |
| **SYSTEME** | ISO/IEC 11801 CLASS Ea |

| Electrical properties | Physical characteristics |
|---|---|
| Max conductors elect résistance : 95 Ω / Km | Fire behaviour : IEC 60332-1 |
| Mutual capacity (nom.) : 45 pF / m | Operating temperature : - 20° C / + 70°C |
| Characteristic impedance : 100 Ω | Minimum bending radius: 8 x cable diameter |
| Velocity of propagation : **66 %** | Conform to RoHS directive |



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# Data Sheet 2/2

Ed. 3

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# REF : FU510xSH

Cable 100 Ω F/UTP 4&8 pairs category 6A 500 MHz - LSZH

## Transmission performances @20°C

| Frequency (MHZ) | ATTENUATION (dB/100m) | | NEXT (dB) | | PS NEXT (dB) | | ELFLEXT (dB) | | RETURN LOSS (dB) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Standard (*) | M.M.C | Standard | M.M.C | Standard | M.M.C | Standard | M.M.C | Standard | M.M.C |
| **4** | 3.8 | **3** | 66.3 | **77** | 63.3 | **74** | 55.8 | **65** | 23.0 | **35** |
| **10** | 6.0 | **5** | 60.3 | **72** | 57.3 | **69** | 47.8 | **50** | 25.0 | **35** |
| **16** | 7.6 | **6.1** | 57.2 | **70** | 54.2 | **67** | 43.7 | **48** | 25.0 | **32.5** |
| **20** | 8.5 | **8.4** | 55.8 | **68** | 52.8 | **65** | 41.8 | **45** | 25 | **35** |
| **31.25** | 10.7 | **9.1** | 52.9 | **66** | 49.9 | **63** | 37.9 | **40** | 23.6 | **34** |
| **62.5** | 15.4 | **15** | 48.4 | **64** | 45.4 | **61** | 31.9 | **36** | 21.5 | **33** |
| **100** | 19.1 | **19** | 45.3 | **60** | 42.3 | **57** | 27.8 | **32** | 20.1 | **32** |
| **200** | 27.5 | **27** | 40.8 | **55** | 37.8 | **52** | 21.8 | **30** | 18 | **31** |
| **250** | 31.0 | **30** | 39.3 | **50** | 36.3 | **47** | 19.8 | **25** | 17.3 | **28** |
| **300** | 34.2 | **32** | 37.2 | **47** | 34.2 | **44** | 16.9 | **20** | 17.3 | **24** |
| **500** | 45.5 | **44** | 34.8 | **45** | 31.8 | **42** | 13.8 | **18** | 17.3 | **22** |

(*) Standard: Values from IEC 61156-5

## Ordering information

| Reference | FU5104SH | FU5108SH |
|---|---|---|
| Pairs nb | 4 | 8 |
| Diameter (mm) | 7.0 | 14.5 |
| Conditioning | 500m –1000m | 500m –1000m |



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