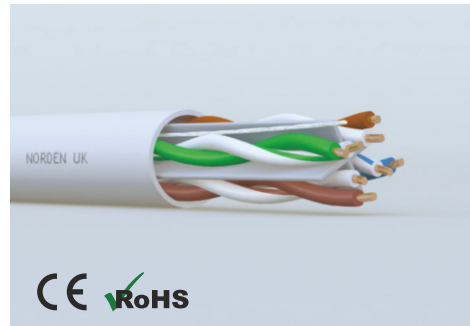


# CATEGORY 6A U/UTP 4 PAIR PLENUM CABLE

Norden Category 6A U/UTP cables exceed Category 6A/Class EA specification. It is tested to 500MHz frequency range and designed to support 10 Gigabyte applications to full 100m. Extremely high pair-balance providing excellent EMC (Electro Magnetic Compatibility), minimizing radiation, maximizing noise immunity and providing high alien cross talk performance to U/UTP (Unshielded Twisted Pair) cabling systems.



UL:E318213

- Outer Jacket
- Center Conductor
- Insulation
- Separator
- Rip Cord

### COMPLIANCE

IEEE 802.3an :2006 (10GBASE-T)  
 IEEE 802.3af and IEEE 802.3at for PoE  
 ANSI/TIA-568.2-D Category 6A ISO/  
 IEC-11801, 2nd Edition Class EA IEC  
 61156-5:2002 Category 6A

## PRODUCT CLASSIFICATION

|                  |                    |
|------------------|--------------------|
| Product Sequence | Premium            |
| Product Type     | Twisted Pair Cable |

## MATERIAL CONSTRUCTION & DESIGN

|                                       |                                   |
|---------------------------------------|-----------------------------------|
| Conductor Material                    | Bare Copper                       |
| Conductor Size                        | 0.57 mm, 23 AWG                   |
| Conductor Construction                | Solid                             |
| Insulation Material                   | High Density Polyethylene (HDPE ) |
| Insulation O.D.                       | 1.03 mm nom.                      |
| Pair Separator Material               | Polyethylene (PE)                 |
| Conductor Unit Identification         | Solid/Stripe                      |
| Colour Code                           | Per TIA/EIA 568-B                 |
| Conductor Unit Lay-Up                 | Pairs                             |
| Total Number of Wires                 | 8                                 |
| Outer Jacket Material                 | PVC Plenum (CMP)                  |
| Outer Jacket thickness & Ex. Diameter | 0.65±0.05 mm, 6.9±0.4 mm          |
| Outer Jacket Colour                   | Per requirement                   |
| Rip Cord                              | Yes                               |

# CATEGORY 6A U/UTP 4 PAIR PLENUM CABLE

## ELECTRICAL & MECHANICAL CHARACTERISTICS

|                                 |   |
|---------------------------------|---|
| Pulling Force                   | 110 N/mm <sup>2</sup> max.                            |
| Delay Skew                      | 25 ns/100m max.                                       |
| Coupling Attenuation            | 85 db min @ 30-100 MHz 85-20 log (f/100) @100-500 MHz |
| Characteristic Impedance        | 100±6 Ω @ 1-500 MHz                                   |
| DC Resistance                   | 72 Ω/Km max.  |
| Resistance Unbalance            | 2 % max.  |
| Capacitance                     | 45 pF/m nom.  |
| Cap. Unbalance (Wire to Ground) | 1500 pF/Km max.                                       |
| Dielectric Strength             | 1.5 KV/ minute min.                                   |
| Velocity of Propagation (NVP)   | 67 %  |
| Insulation Resistanc            | 5000 MΩ•Km min.                                       |
| Transfer Impedance              | N/A   |
| Short Term Bend Radius          | 8 x OD mm   |
| Long Term Bend Radius           | 4 x OD mm   |
| Operating Temperature Range     | -20°C to +60°C  |
| Storage Temperature             | -20°C to +80°C  |

## TRANSMISSION PERFORMANCE

Cat. 6A Un-screened Pair Horizontal Cables\*

| Freq. MHz | Attenuation dB/100m @ 20°C | NEXT dB | PS dB | NEXT | RL dB | ACR dB | ELFEXT dB | PSELFEXT dB |
|-----------|----------------------------|---------|-------|------|-------|--------|-----------|-------------|
| 1         | 1.7                        | 86.3    | 83.3  |      | 26.0  | 84.6   | 84.0      | 80.0        |
| 4         | 3.4                        | 85.0    | 83.0  |      | 29.0  | 75.6   | 81.0      | 78.0        |
| 10        | 5.4                        | 77.3    | 74.3  |      | 31.0  | 71.9   | 76.0      | 73.0        |
| 20        | 7.6                        | 70.0    | 67.0  |      | 30.0  | 62.4   | 70.0      | 67.0        |
| 31.25     | 9.7                        | 68.0    | 65.0  |      | 29.8  | 58.3   | 65.0      | 63.0        |
| 100       | 18.0                       | 65.3    | 62.3  |      | 27.1  | 47.3   | 55.0      | 52.8        |
| 150       | 23.6                       | 62.0    | 59.8  |      | 26.0  | 38.4   | 53.5      | 51.5        |
| 200       | 27.4                       | 59.0    | 57.2  |      | 25.0  | 31.6   | 49.0      | 46.0        |
| 250       | 31.0                       | 57.6    | 54.6  |      | 25.2  | 26.6   | 44.0      | 41.0        |
| 300       | 34.2                       | 55.0    | 52.0  |      | 24.0  | 20.3   | 39.6      | 36.6        |
| 400       | 40.0                       | 53.0    | 51.8  |      | 21.8  | 13.0   | 37.0      | 34.0        |
| 500       | 42.2                       | 52.0    | 50.0  |      | 21.8  | 9.8    | 35.0      | 33.0        |

\*Supplied cables meets Cat. 6a min. transmission requirements as per IEC 61156-5 Ed. 2

## ORDERING INFORMATION

| Part Number   | Description                           | Standard Length |
|---------------|---------------------------------------|-----------------|
| 114-15004104X | Category 6A U/UTP 4 Pair Cable Plenum | 305 mtr         |

X:BK(Black), BL(Blue), GN(Green), GY(Gray), RD(Red), WH(White), YL(Yellow)

## PACKING INFORMATION

| Part Number   | Packing Mode     | N.W (kg) | G.W (kg) | Dimension (mm)  |
|---------------|------------------|----------|----------|-----------------|
| 114-15004104X | Plywood Reel/Ctn | 15.7     | 17.3     | 340 x 340 x 340 |