

# TECHNICAL DATA SHEET

## F/UTP 4Pairs cable-category 5E-PVC Sheath

P/N: G2302-118

| Content of the Data Sheet                |                                     |                        |                                 |            |                                                                                                                                                                                                                          |            |               |              |                 |  |
|------------------------------------------|-------------------------------------|------------------------|---------------------------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------------|--------------|-----------------|--|
| Sheath Printing                          | TBD                                 |                        |                                 |            |                                                                                                                                                                                                                          |            |               |              |                 |  |
| Customer No.                             |                                     | Customer Reference     |                                 |            | <div>White(blue)/blue</div> <div>White-Orange/Orange</div> <div>Sheath</div> <div>Mylar</div> <div>Rip-cord</div> <div>AL/Mylar</div> <div>Drain wire</div> <div>White- Brown /Brown</div> <div>White(green)/green</div> |            |               |              |                 |  |
| Category                                 | F/UTP CAT5E-4P-PVC(Eca)             |                        |                                 |            |                                                                                                                                                                                                                          |            |               |              |                 |  |
| Reference Standard                       | ISO/IEC11801、EN 50173、TIA-568-C.2   |                        |                                 |            |                                                                                                                                                                                                                          |            |               |              |                 |  |
| Conductor                                | Material                            | Solid-Bare Copper      |                                 |            |                                                                                                                                                                                                                          |            |               |              |                 |  |
|                                          | Nom.O.D.(mm)                        | 0.500                  | up                              | +0.005     | down                                                                                                                                                                                                                     | -0.005     |               |              |                 |  |
| Insulation                               | Material                            | HDPE                   |                                 |            |                                                                                                                                                                                                                          |            |               |              |                 |  |
|                                          | Diameter                            | 1.00±0.05 mm           |                                 |            |                                                                                                                                                                                                                          |            |               |              |                 |  |
| Screening Material                       | Mylar+ AL/Mylar                     |                        |                                 |            |                                                                                                                                                                                                                          |            |               |              |                 |  |
| Sheath                                   | Thickness                           | 0.55±0.05mm            |                                 |            | Technical Performance (100m):                                                                                                                                                                                            |            |               |              |                 |  |
|                                          | External O.D.                       | 6.2±0.4 mm             |                                 |            | Frequency (MHz)                                                                                                                                                                                                          | RL ≥dB     | ATT (20℃) ≤dB | NEXT ≥dB     | PHASE DELAY ≤ns |  |
|                                          | Surface                             | Clean,Frap,Satiation   |                                 |            | 1                                                                                                                                                                                                                        | 20.0       | —             | 65.3         | 570.00          |  |
|                                          | Material                            | PVC(complies RoHS)     |                                 |            | 4                                                                                                                                                                                                                        | 23.0       | 4.1           | 56.3         | 552.00          |  |
|                                          | Color                               | TBD                    |                                 |            | 8                                                                                                                                                                                                                        | 24.5       | 5.8           | 51.8         | 546.73          |  |
| Surface Printing                         | Letter height                       | 3.0±0.3mm              |                                 |            | 10                                                                                                                                                                                                                       | 25.0       | 6.5           | 50.3         | 545.38          |  |
|                                          | Color                               | Black                  |                                 |            | 16                                                                                                                                                                                                                       | 25.0       | 8.2           | 47.2         | 543.00          |  |
|                                          | Print error & Space                 | ≤±0.5%, 1m             |                                 |            | 20                                                                                                                                                                                                                       | 25.0       | 9.3           | 45.8         | 542.05          |  |
| Core Color                               | 1 White- Blue /Blue                 | 2 White-Orange /Orange |                                 |            | 25                                                                                                                                                                                                                       | 24.3       | 10.4          | 44.3         | 541.20          |  |
|                                          | 3 White- Green /Green               | 4 White- Brown /Brown  |                                 |            | 31.25                                                                                                                                                                                                                    | 23.6       | 11.7          | 42.9         | 540.44          |  |
| Packing                                  | Wooden Tray & Carton                |                        |                                 |            | 62.5                                                                                                                                                                                                                     | 21.5       | 17.0          | 38.4         | 538.55          |  |
| Carton dimension                         | According to the requires           |                        |                                 |            | 100                                                                                                                                                                                                                      | 20.1       | 22.0          | 35.3         | 537.60          |  |
| Packing length                           | 305±1.5m                            |                        |                                 |            | Frequency (MHz)                                                                                                                                                                                                          | PSNEXT ≥dB | ELFEXT ≥dB    | PSELFEXT ≥dB |                 |  |
| Rip-cord                                 | Yes                                 | Drain wire             | Yes                             |            | 1                                                                                                                                                                                                                        | 62.3       | 63.8          | 60.8         |                 |  |
| Sheath Physical Properties               | Before Aging Tensile Strength (Mpa) |                        | ≥13.5                           |            |                                                                                                                                                                                                                          | 4          | 53.3          | 51.8         | 48.8            |  |
|                                          | Elongation(%)                       |                        | ≥150                            |            |                                                                                                                                                                                                                          | 8          | 48.8          | 45.7         | 42.7            |  |
|                                          | Aging Period( (℃×hrs)               |                        | 100℃×24h×7d                     |            |                                                                                                                                                                                                                          | 10         | 47.3          | 43.8         | 40.8            |  |
|                                          | After Aging Tensile Strength(Mpa)   |                        | ≥12.5                           |            |                                                                                                                                                                                                                          | 16         | 44.4          | 39.7         | 36.7            |  |
|                                          | Elongation(%)                       |                        | ≥125                            |            |                                                                                                                                                                                                                          | 20         | 42.8          | 37.8         | 34.8            |  |
| Electrical Characteristics (20℃)         | Cold bend(-20±2℃×4h)                |                        | 8×Cable O.D., No visible cracks |            |                                                                                                                                                                                                                          | 25         | 41.3          | 35.8         | 32.8            |  |
|                                          | 1.0-100.0MHz                        | Impedance(Ω)           | 100±15                          |            |                                                                                                                                                                                                                          | 31.25      | 39.9          | 33.9         | 30.9            |  |
|                                          | 1.0-100.0MHz                        | Delay Skew (ns/100m)   | ≤45                             |            |                                                                                                                                                                                                                          | 62.5       | 35.4          | 27.9         | 24.9            |  |
|                                          | unbalanced-to-ground capacitance    |                        | (pf/100m) max 330               |            |                                                                                                                                                                                                                          | 100        | 32.3          | 23.8         | 20.8            |  |
|                                          | DC Resistance (Ω/100m) max          |                        | 9.5                             |            |                                                                                                                                                                                                                          |            |               |              |                 |  |
| DC Conductor Resistance Unbalance (%)max |                                     | 5.0                    |                                 |            |                                                                                                                                                                                                                          |            |               |              |                 |  |
| Reaction to fire Classification: Eca     |                                     |                        |                                 |            |                                                                                                                                                                                                                          |            |               |              |                 |  |
| Version                                  | A/01                                | Date                   | 2017-12-16                      | Revised By | Caihanglie                                                                                                                                                                                                               | Audited By | Nidonghua     | Approved By  | Nidonghua       |  |