QPCOM®
QUALITY PRICE

# Spec Sheet
# QP-65704PE

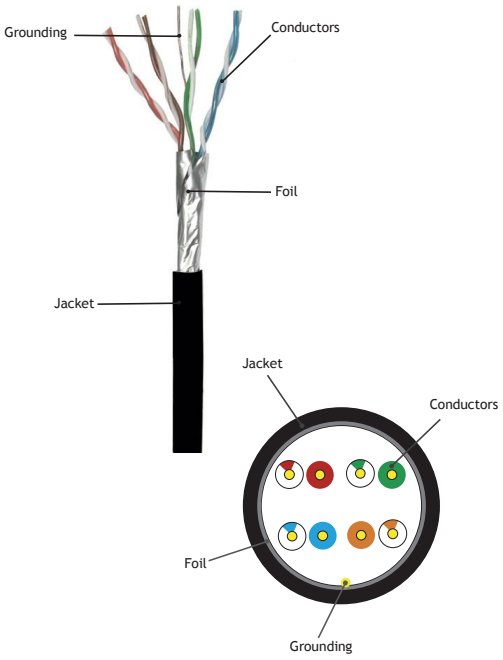

## *FTP Solid Cable CAT. 5E, 24 AWG, 4 Pairs, CM for external use, box of 305 meters*

### *Description:*

Extended frequency to 100 MHz, 4 x 24 AWG - FTP PE Cable. Backward-compatibility with all CAT. 5E Products an application. Guarantee full-duplex and crosstalk values. RoHS compliant . Solid bare copper conductors insulated with thermoplastics polyolefin

## *SPECIFICATIONS:*

| CABLE DESCRIPTION | |
|---|---|
| ***1 - CONDUCTOR*** | |
| Size | 24 AWG |
| Type | Solid Bare Copper |
| Diameter (mm) | 0,51 ± 0,01 |
| ***2 - INSULATION*** | |
| Type | PE |
| Diameter (mm) | 1,03 ± 0,05 |
| Min. Thickness (mm) | 0,23 |
| ***3 - PAIRS*** | |
| Color Code | |
| Pair 1 | Blue/White - blue strip |
| Pair 2 | Orange/White - Orange Strip |
| Pair 3 | Green/White - green strip |
| Pair 4 | Brown/White - brwon stripe |
| ***4 - SHIELD*** | |
| Type Overall | Polyester Tape |
| Tinned copper drain wire (mr | 0,495 ± 0,008 |
| Type Overall | Alumunium Polyester Tape |
| ***5 - JACKET*** | |
| Type | PE |
| Overall Diameter (mm) | 5,99 ± 0,3 |



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| TECHNICAL DATA - PHYSICAL | | |
|---|---|---|
| ***1. Color bend Test*** | -20 ± 2°C X 4hrs no. Crack | |
| ***2. Dielectric Strenght*** | AC 1,2 KV/min | |
| ***3. Insulation*** | ***Before Aging*** | ***After Aging*** |
| Min Tension strengh (psi) | 2400 | 75% before aging (100°C x 48hrs) |
| Min elongation (%) | 300 | 75% before aging (100°C x 48hrs) |
| ***4. Jacket*** | | |
| Min Tension strengh (psi) | 1400 | 75% before aging (100°C x 240hrs) |
| Min elongation (%) | 350 | 75% before aging (100°C x 240hrs) |
| ***5. Min bending Radius (mm)*** | 50 | |
| ***6. Max. Pulling tension*** | 25 | |
| ***7. Installation temperature*** | -10°C to + 60°C | |
| ***8 Operating temperature*** | -10°C to + 60°C | |

| TECHNICAL DATA - ELECTRICAL | | | |
|---|---|---|---|
| ***1. Conductor resistance*** (Ω/100m @ 20°C) | Max. | 9,5 | |
| ***2. DC resistance unbalance*** (%) | Max. | 4 | |
| ***3. Pair to ground capacitance unbalance*** (pF/km) | Max. | 1600 | |
| ***4. Delay skew*** (ns/100m) | Max. | 45 | 4 ≤ f ≤ 100MHz |
| ***5. Insertion loss*** (dB/100m) | Max. | 1,967 *√f + 0,023 * 0,1/√f | 1 ≤ f ≤ 100MHz |
| ***6. Pair to Pair NEXT*** (dB/100m) | Min. | 65,3 - 15 * log (f) | 1 ≤ f ≤ 100MHz |
| ***7. PowerSum pr-pr NEXT*** (dB/100m) | Min. | 62,3 - 15 * log (f) | 1 ≤ f ≤ 100MHz |
| ***8. ELFEXT*** (dB/100m) | Min. | 64 - 20* log (f) | 1 ≤ f ≤ 100MHz |
| ***9. PowerSum ELFEXT*** (dB/100m) | Min. | 61 - 20 * log (f) | 1 ≤ f ≤ 100MHz |
| ***10. Return Loss*** (dB) | Min. | 20 + 5 * log (f) | 1 ≤ f ≤ 10MHz |
| | | 25 | 10 ≤ f < 20MHz |
| | | 25 - 7 * log (f / 20) | 20 ≤ f ≤ 100MHz |
| ***11. Propagation Delay*** (ns/100m) | Max. | 534 + 36/√f | 1 ≤ f ≤ 100MHz |
| ***12. Input Impendance*** (Ω) | | 100 ± 15% | 1 ≤ f ≤ 100MHz |

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| IEC 61156-5 ed 2.0 CATEGORY 5E horizontal cable parameters | | | | | | | |
|---|---|---|---|---|---|---|---|
| Freq. (MHz) | Ins. Loss (dB/100m) | RL (dB) | Pair to Pair | | Power Sum | | Po. Delay (ns/100) |
| | | | NEXT | ELFEXT | NEXT | ELFEXT | |
| | | | (dB/100m) | | (dB/100m) | | |
| | Max. | Min. | Min. | Min. | Min. | Min. | Max. |
| 1 | --- | 20,0 | --- | --- | --- | --- | --- |
| 4 | 4,1 | 23,0 | 56,3 | 52,0 | 53,3 | 55,0 | 552,0 |
| 10 | 6,5 | 25,0 | 50,3 | 44,0 | 47,3 | 47,0 | 545,4 |
| 16 | 8,3 | 25,0 | 47,2 | 39,9 | 44,2 | 42,9 | 543,0 |
| 20 | 9,3 | 25,0 | 45,8 | 38,0 | 42,8 | 41,0 | 542,0 |
| 31.25 | 11,7 | 23,6 | 42,9 | 34,1 | 39,9 | 37,1 | 540,4 |
| 62.5 | 17,0 | 21,5 | 38,4 | 28,1 | 35,4 | 31,1 | 538,6 |
| 100 | 22,0 | 20,1 | 35,3 | 24,0 | 32,3 | 27,0 | 537,6 |

***Features:***

Standards:
- International: IEC 61156-5 edit 2.0
- North American: ANSI/TIA/EIA-568-C.2 CAT 5E