

F-UTP Cat 6 FEP CMP



Revision History

| | |
|--------------------|---------------------|
| Part No:RGW-2453-5 | Price NO: RGW-03866 |
| Prepared by:CXY | Date: 2018/6/8 |
| Approved by: | Page: 1 of 1 |

Product Code: F-UTP Cat 6 FEP CMP

Product Description

Application:

Primary (Campus), Secondary (Riser), Tertiary (Horizontal)
 IEEE 802.3an: 10Base-T; 100Base-TX; 1000Base-T
 IEEE 802.5 16 MB; ISDN; TPDDI; ATM
 IEEE 802.3af-2002: POE; IEEE 802.3at: POE+

Reference Standard

ISO/IEC 11801-1:2017 (Ed. 1.0) / ISO/IEC 11801-2:2017(Ed. 1.0);
 IEC61156-5:2012;ANSI/TIA-568-C.2 ;EN50173; EN50288; UL444

Multi-construction

4 Pair

Cable Construction

| | |
|--|-------------------------|
| 1.Conductor | Bare Copper |
| Construction | 0.57±0.01 |
| 2.Insulation | FEP |
| Insulation Dia.(mm) | 1.08±0.08×2C Twist |
| Each Pair is Twisted ,Unshielded. | |
| 3.Filler | FEP Cross Member |
| 4.Total Mylar Spiral | >=115% |
| 5.Drain wire | Tinned Copper |
| Construction (mm) | T0.40±0.008 |
| 6.AI-Pet (FR) Shielded | >=115% |
| 7.Jacket | CMP PVC |
| Dia.(mm) | 6.60±0.40 |
| Jacket Color | Grey(RAL7044) |
| Color | |
| Insulation color are: | |
| Blue, White | Orange,White |
| Green, White | Brown, White |

Marking(ink black,one per meter)

RG Wire & Cable #2188 CAT 6 F/UTP UL CMP E478021 ANSI/TIA-568-C.2 & ISO/IEC 11801 Category 6 [week year] [meter mark]

PACKAGING

500M/Reel

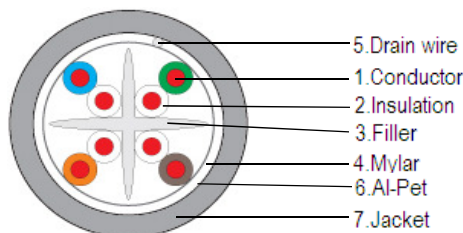
Label

| |
|-----------------------------|
| RG Wire & Cable Ltd |
| CAT 6 F/UTP CMP Grey |
| 500M |
| RoHS2(2011/65/EU) Compliant |
| 2188 RG???? WW/YY |

UL Label

| | | | |
|-----------|-----------------------|-----------|------|
| FILE No.: | E478021 | STYLE: | CMP |
| AWG: | 8×23AWG | MAX TEMP: | 75°C |
| SER No. | INSULATION 10MILS FEP | | |
| | JACKET 18MILS PVC | | |
| LENGTH: | 1641FT | MFG DATE: | |

Design



Electrical Characteristics

Performance

| FREQ (MHz) | FITTED IMPEDANCE Ohms | INSERTION LOSS (dB/100m) Spec | RETURN LOSS (dB/100m) Spec | PAIR-PAIR NEXT (dB/100m) Spec | PSNEXT (dB/100m) Spec |
|------------|-----------------------|-------------------------------|----------------------------|-------------------------------|-----------------------|
| 1 | 100+/-15 | 2.0 | 20.0 | 74.3 | 72.3 |
| 4 | 100+/-15 | 3.8 | 22.9 | 65.3 | 63.3 |
| 8 | 100+/-15 | 5.3 | 24.5 | 60.8 | 58.8 |
| 10 | 100+/-15 | 6.0 | 25.0 | 59.3 | 57.3 |
| 16 | 100+/-15 | 7.6 | 25.0 | 56.2 | 54.2 |
| 20 | 100+/-15 | 8.5 | 25.0 | 54.8 | 52.8 |
| 25 | 100+/-15 | 9.5 | 24.3 | 53.3 | 51.3 |
| 31.25 | 100+/-15 | 10.7 | 23.6 | 51.9 | 49.9 |
| 62.5 | 100+/-15 | 15.4 | 21.5 | 47.4 | 45.4 |
| 100 | 100+/-15 | 19.8 | 20.1 | 44.3 | 42.3 |
| 200 | 100+/-15 | 29.0 | 18.0 | 39.8 | 37.8 |
| 250 | 100+/-15 | 32.8 | 17.3 | 38.3 | 36.3 |

| FREQ (MHz) | PAIR-PAIR ACR (dB/100m) Spec | PSACR (dB/100m) Spec | PAIR-PAIR ACRF (dB/100m) Spec | PSACRF (dB/100m) Spec |
|------------|------------------------------|----------------------|-------------------------------|-----------------------|
| 1 | 72.3 | 70.3 | 67.8 | 64.8 |
| 4 | 61.5 | 59.5 | 55.8 | 52.8 |
| 8 | 55.4 | 53.4 | 49.7 | 46.7 |
| 10 | 53.3 | 51.3 | 47.8 | 44.8 |
| 16 | 48.7 | 46.7 | 43.7 | 40.7 |
| 20 | 46.3 | 44.3 | 41.8 | 38.8 |
| 25 | 43.8 | 41.8 | 39.8 | 36.8 |
| 31.25 | 41.2 | 39.2 | 37.9 | 34.9 |
| 62.5 | 32.0 | 30.0 | 31.9 | 28.9 |
| 100 | 24.5 | 22.5 | 27.8 | 24.8 |
| 200 | 10.8 | 8.8 | 21.8 | 18.8 |
| 250 | 5.5 | 3.5 | 19.8 | 16.8 |

Note: The inspection will be according to TIA Cat 6 Perm.Link & ISO 11801 PL Class E of Fluke at 90m

| | |
|--|-------------------------------|
| Max.Conductor DC Resistance at 20°C (Ω/Km) | <76 |
| Rated Temperature(°C) | 75 |
| Velocity ratio | 72% |
| Mutual Capacitance | 5.6 nF/100 m maximum |
| Delay Skew | 45ns/100 m maximum |
| Propagation Delay | 538ns/100 m maximum @ 100 MHz |
| Bend Radius | 8 × cable diameter |

Fire Performance: CMP
 UL File NO. E478021

Revise record

RGW-2463-4 2018-4-17 "Performance" Update
 RGW-2463-5 2018-6-8 Rev Marking and Add Label

