



#### 10GXS13

**Part Number:** 10GXS13 0041000

Enhanced Category 6A Nonbonded-Pair Cable

### **Product Description**

Category 6A Enhanced (625MHz), 4-Unbonded-Pair, Plenum-CMP, Premise Horizontal Cable, 23 AWG Solid Bare Copper Conductors, FEP Insulation, Patented EquiSpline™ & EquiBlock™ Technologies, Ripcord, Flamarrest Jacket

# **Product Specifications**

### **Technical Specifications**

| ~- |       | 1-1- | A  |      | - 4.5 |      |
|----|-------|------|----|------|-------|------|
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|    |       |      |    |      |       |      |

Premise Horizontal Cable, 10 Gigabit Ethernet, Wireless, WIFI, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU Digital Audio, AES51, RS-422, Noisy Environments, PoE, PoE Plus

#### **Construction and Dimensions**

#### Conductor:

| AWG | Stranding | Material         | No. of Pairs |
|-----|-----------|------------------|--------------|
| 23  | Solid     | BC - Bare Copper | 4            |
|     |           |                  |              |

| Total Number of Conductors: | 8 |
|-----------------------------|---|

#### Insulation:

#### Material

FEP - Fluorinated Ethylene Propylene

#### Color Chart 1:

| Number | Color |
|--------|-------|
|        |       |

| 1 | White/Blue Stripe & Blue     |
|---|------------------------------|
| 2 | White/Orange Stripe & Orange |
| 3 | White/Green Stripe & Green   |
| 4 | White/Brown Stripe & Brown   |

#### Outerjacket 1:

| Material                    | Material Trade Name | Nominal Diameter | Ripcord | Separator Material                    |
|-----------------------------|---------------------|------------------|---------|---------------------------------------|
| PVC - Polyvinyl<br>Chloride | Flamarrest®         | 0.265 in         | Yes     | Patented EquiSpline<br>Central Member |

## **Electrical Characteristics**

#### **Conductor DCR:**

| Max. Conductor DCR | Max. DCR Unbalance |
|--------------------|--------------------|
| 7.5 Ohm/100m       | 3 %                |

### Capacitance:

| Nominal Mutual Capacitance |  |
|----------------------------|--|
| 17 pF/ft                   |  |

### Delay:

| Max. Delay Description | Max. Delay Skew | Nominal Velocity of<br>Propagation (VP) | Typical Delay Skew |
|------------------------|-----------------|---|--------------------|
| 537 @ 100MHz           | 45 ns/100m      | 0.69 ns/100m                            | 30 ns/100m         |

### High Freq:

| Frequenc<br>[MHz] | eyMax.<br>Insertion<br>Loss<br>(Attenuat |         | Min.<br>PSACR | Min.<br>PSACRF<br>(PSELFEX | Min. RL<br>(Return<br>TLoss) | Input           | . Max./Min<br>Fitted<br>campedand | <b>PSANEXT</b> | Min.<br>PSAACRF | Min. TCL | Min.<br>ELTCTL |
|-------------------|--|---------|---------------|----------------------------|------------------------------|-----------------|-----------------------------------|----------------|-----------------|----------|----------------|
| 1 MHz             | 2.1<br>db/100n                           | 75.3 dB | 73.2 dB       | 74.8 dB                    | 20 dB                        | 100 ± 15<br>Ohm | 105 ± 10<br>Ohm                   | 75 dB          | 77 dB           | 40 dB    | 35 dB          |
| 4 MHz             | 3.8<br>db/100n                           | 66.3 dB | 62.5 dB       | 62.8 dB                    | 23 dB                        | 100 ± 15<br>Ohm | 100 ± 15<br>Ohm                   | 75 dB          | 76.2 dB         | 40 dB    | 23 dB          |
| 8 MHz             | 5.3<br>db/100n                           | 61.8 dB | 56.5 dB       | 56.7 dB                    | 24.5 dB                      | 100 ± 15<br>Ohm | 100 ± 15<br>Ohm                   | 75 dB          | 70.1 dB         | 40 dB    | 16.9 dB        |
| 10 MHz            | 5.9<br>db/100n                           | 60.3 dB | 54.4 dB       | 54.8 dB                    | 25 dB                        | 100 ± 15<br>Ohm | 100 ± 15<br>Ohm                   | 75 dB          | 68.2 dB         | 40 dB    | 15 dB          |
| 16 MHz            | 7.4<br>db/100n                           | 57.2 dB | 49.8 dB       | 50.7 dB                    | 25 dB                        | 100 ± 15<br>Ohm | 100 ± 15<br>Ohm                   | 75 dB          | 64.1 dB         | 38 dB    | 10.9 dB        |

| 20 MHz       | 8.3<br>db/100m 55.8 dB  | 47.5 dB | 48.8 dB | 25 dB   | 100 ± 15<br>Ohm | 100 ± 15<br>Ohm | 75 dB   | 62.2 dB | 37 dB   | 9 dB   |
|--------------|-------------------------|---------|---------|---------|-----------------|-----------------|---------|---------|---------|--------|
| 25 MHz       | 9.3<br>db/100m 54.3 dB  | 45 dB   | 46.8 dB | 24.3 dB | 100 ± 15<br>Ohm | 100 ± 15<br>Ohm | 75 dB   | 60.2 dB | 36 dB   | 7 dB   |
| 31.25<br>MHz | 10.4<br>db/100m 52.9 dB | 42.5 dB | 44.9 dB | 23.6 dB | 100 ± 15<br>Ohm | 100 ± 10<br>Ohm | 75 dB   | 58.3 dB | 35.1 dB | 5.1 dB |
| 62.5<br>MHz  | 14.8<br>db/100m 48.4 dB | 33.6 dB | 38.9 dB | 21.5 dB | 100 ± 15<br>Ohm | 100 ± 10<br>Ohm | 73.6 dB | 52.3 dB | 32 dB   |        |
| 100<br>MHz   | 18.9<br>db/100m 45.3 dB | 26.4 dB | 34.8 dB | 20.1 dB | 100 ± 15<br>Ohm | 100 ± 10<br>Ohm | 70.5 dB | 48.2 dB | 30 dB   |        |
| 200<br>MHz   | 27.0<br>db/100m 40.8 dB | 13.8 dB | 28.8 dB | 18 dB   | 100 ± 22<br>Ohm | 100 ± 10<br>Ohm | 66 dB   | 42.2 dB | 27 dB   |        |
| 250<br>MHz   | 30.4<br>db/100m 39.3 dB | 9 dB    | 26.8 dB | 17.3 dB | 100 ± 32<br>Ohm | 100 ± 10<br>Ohm | 64.5 dB | 40.2 dB | 26 dB   |        |
| 300<br>MHz   | 33.5<br>db/100m 38.1 dB | 4.6 dB  | 25.3 dB | 16.8 dB | 100 ± 32<br>Ohm | 100 ± 10<br>Ohm | 63.3 dB | 38.7 dB | 25.2 dB |        |
| 350<br>MHz   | 36.3<br>db/100m 37.1 dB | 0.8 dB  | 23.9 dB | 16.3 dB | 100 ± 32<br>Ohm | 100 ± 10<br>Ohm | 62.3 dB | 37.3 dB | 24.6 dB |        |
| 400<br>MHz   | 39.0<br>db/100m 36.3 dB |         | 22.8 dB | 15.9 dB | 100 ± 32<br>Ohm | 100 ± 10<br>Ohm | 61.5 dB | 36.2 dB | 24 dB   |        |
| 450<br>MHz   | 41.5<br>db/100m 35.5 dB |         | 21.7 dB | 15.5 dB | 100 ± 32<br>Ohm | 100 ± 10<br>Ohm | 60.7 dB | 35.1 dB | 23.5 dB |        |
| 500<br>MHz   | 43.9<br>db/100m 34.8 dB |         | 20.8 dB | 15.2 dB | 100 ± 32<br>Ohm | 100 ± 10<br>Ohm | 60 dB   | 34.2 dB | 23 dB   |        |
| 550<br>MHz   | 46.2<br>db/100m 34.2 dB |         | 20 dB   | 14.9 dB | 100 ± 32<br>Ohm | 100 ± 10<br>Ohm | 59.4 dB | 33.4 dB |         |        |
| 600<br>MHz   | 48.4<br>db/100m 33.6 dB |         | 19.2 dB | 14.7 dB | 100 ± 32<br>Ohm | 100 ± 10<br>Ohm | 58.8 dB | 32.6 dB |         |        |
| 625<br>MHz   | 49.5<br>db/100m 33.4 dB |         | 18.9 dB | 14.5 dB | 100 ± 32<br>Ohm | 100 ± 10<br>Ohm | 58.6 dB | 32.3 dB |         |        |
| 750<br>MHz   | 54.7<br>db/100m 32.2 dB |         | 17.3 dB | 14 dB   |                 |                 | 57.4 dB | 30.7 dB |         |        |
| 860<br>MHz   | 59.9<br>db/100m 31.3 dB |         | 16.1 dB | 13.6 dB |                 |                 | 56.5 dB | 29.5 dB |         |        |

### Voltage:

## **UL Voltage Rating**

300 A

## Use

| Suitability - Outdoor:             | No |
|------------------------------------|----|
| Suitability - Sunlight Resistance: | No |

| Max Recommended Pulling Tension: | 40 lbs |
|----------------------------------|--------|
|----------------------------------|--------|

### Safety

| C(UL) Flammability: | FT6                                |  |
|---------------------|------------------------------------|--|
| CSA Flammability:   | FT6                                |  |
| UL Flammability:    | NFPA 262 Plenum Flame Test (UL910) |  |

# Temperature Range

| Installation Temp Range: | +5°C To +50 °C  |
|--------------------------|-----------------|
| Operating Temp Range:    | -20°C To +75 °C |
| Storage Temp Range:      | -20°C To +75 °C |

## **Mechanical Characteristics**

| Min Bend Radius/Minor Axis:   | 1.1 in |
|-------------------------------|--------|
| Min Bend Radius/Installation: | 2.5 in |

### Part Number

| Plenum (Y/N):      | Yes     |
|--------------------|---------|
| Non-Plenum Number: | 10GXS12 |

### Standards

| ISO/IEC Compliance:               | 11801 ed 2.1 (2008) Class EA     |  |
|-----------------------------------|----------------------------------|--|
| Telecommunications Standards:     | ANSI/TIA/EIA 568 C.2 Category 6A |  |
| CA Prop 65 (CJ for Wire & Cable): | Yes                              |  |
| CEC/C(UL) Specification:          | CMP                              |  |
| MII Order #39 (China RoHS):       | Yes                              |  |
| NEC/(UL) Specification:           | CMP                              |  |
| EU Directive Compliance:          | EU Directive 2003/11/EC (BFR)    |  |
| EU CE Mark:                       | Yes                              |  |

### History

Notes:

Jacket sequentially printed every 2 ft/1m. Third party channel verified to TIA 568-C.2, Category 6A. Meets Component Requirements for TIA 568-C.2 Category 6A Horizontal Cable, Values above 625MHz for Engineering Information Only

#### **Product Variants**

| Part Number     | Color  | Put-Up Type | Length  |
|-----------------|--------|-------------|---------|
| 10GXS13 0021000 | Red    | Reel        | 1000 ft |
| 10GXS13 0031000 | Orange | Reel        | 1000 ft |
| 10GXS13 0041000 | Yellow | Reel        | 1000 ft |
| 10GXS13 0051000 | Green  | Reel        | 1000 ft |
| 10GXS13 0071000 | Purple | Reel        | 1000 ft |
| 10GXS13 0081000 | Gray   | Reel        | 1000 ft |
| 10GXS13 0091000 | White  | Reel        | 1000 ft |
| 10GXS13 0101000 | Black  | Reel        | 1000 ft |
| 10GXS13 D151000 | Blue   | Reel        | 1000 ft |
| 10GXS13002A1000 | Red    | Reel-in-Box | 1000 ft |
| 10GXS13003A1000 | Orange | Reel-in-Box | 1000 ft |
| 10GXS13004A1000 | Yellow | Reel-in-Box | 1000 ft |
| 10GXS13005A1000 | Green  | Reel-in-Box | 1000 ft |
| 10GXS13007A1000 | Purple | Reel-in-Box | 1000 ft |
| 10GXS13008A1000 | Gray   | Reel-in-Box | 1000 ft |
| 10GXS13009A1000 | White  | Reel-in-Box | 1000 ft |
| 10GXS13010A1000 | Black  | Reel-in-Box | 1000 ft |
| 10GXS13D15A1000 | Blue   | Reel-in-Box | 1000 ft |

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