



## 10GXS12

Part Number: 10GXS12 0021000

Enhanced Category 6A Nonbonded-Pair Cable

## **Product Description**

Category 6A Enhanced (625MHz), 4-Unbonded-Pair, Riser-CMR, Premise Horizontal Cable, 23 AWG Solid Bare Copper Conductors, Polyolefin Insulation, Patented EquiSpline™ & EquiBlock™ Technologies, Ripcord, PVC Jacket

## **Product Specifications**

## **Technical Specifications**

Suitable Applications:	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
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#### **Construction and Dimensions**

#### Conductor:

AWG	Stranding		No. of Pairs	
23	Solid	BC - Bare Copper	4	
Total Number of Conductors:		8		

#### Insulation:

Material	
PO - Polyolefin	

#### 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	Nominal Diameter Ripcord		Separator Material	
PVC - Polyvinyl Chloride	0.273 in	Yes	Patented EquiSpline Central Member	

## **Electrical Characteristics**

#### Conductor DCR:

Max. Conductor DCR	Max. DCR Unbalance		
7.9 Ohm/100m	3 %		

## Capacitance:

Nominal Mutual Capacitance	
17 pF/ft	

## Delay:

Max. Delay Description	Max. Delay Skew	Nominal Velocity of Propagation (VP)	Typical Delay Skew	
537 @ 100MHz	45 ns/100m	0.65 ns/100m	30 ns/100m	

## High Freq:

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

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

## Voltage:

UL Voltage Rating	
300 V	

## Use

Suitability - Outdoor:	No
Suitability - Sunlight Resistance:	No

Max Recommended Pulling Tension:	40 lbs	
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## Safety

C(UL) Flammability:	FT4
CSA Flammability:	FT4
IEEE Flammability:	1202 Vertical Tray Flame Test
UL Flammability:	UL1666 Riser

## 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):	No
Plenum Number:	10GXS13

## 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:	CMR	
MII Order #39 (China RoHS):	Yes	
NEC/(UL) Specification:	CMR	
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)	
EU CE Mark:	Yes	

## History

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

Notes:

Part Number	Color	Put-Up Type	Length
10GXS12 0021000	Red	Reel	1000 ft
10GXS12 0031000	Orange	Reel	1000 ft
10GXS12 0041000	Yellow	Reel	1000 ft
10GXS12 0051000	Green	Reel	1000 ft
10GXS12 0061000	Blue	Reel	1000 ft
10GXS12 0071000	Purple	Reel	1000 ft
10GXS12 0081000	Gray	Reel	1000 ft
10GXS12 0091000	White	Reel	1000 ft
10GXS12 0101000	Black	Reel	1000 ft
10GXS12002A1000	Red	Reel-in-Box	1000 ft
10GXS12003A1000	Orange	Reel-in-Box	1000 ft
10GXS12004A1000	Yellow	Reel-in-Box	1000 ft
10GXS12005A1000	Green	Reel-in-Box	1000 ft
10GXS12006A1000	Blue	Reel-in-Box	1000 ft
10GXS12007A1000	Purple	Reel-in-Box	1000 ft
10GXS12008A1000	Gray	Reel-in-Box	1000 ft
10GXS12009A1000	White	Reel-in-Box	1000 ft
10GXS12010A1000	Black	Reel-in-Box	1000 ft

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