

GLCAU6P-B

4 X 23AWG – 250MHz U-UTP PVC Cable

Application

For horizontal network and voice application in a structured cabling system , including IEEE802.3 1000 Base-T, 100 Base-Tx, 10 Base-T, 1000 Base-Tx (ANSI/TIA/EIA-854-2001), 155Mb/s ATM, 4/16 Mb/s Token ring etc..

Construction

Solid bare copper conductors insulated with polyolefin. Two insulated conductors twisted together to form a pair and four such pairs cabled to form the basic unit. A cross filler is cabled in between to separate the 4 pairs insulated conductors Overall jacket with PVC compound.

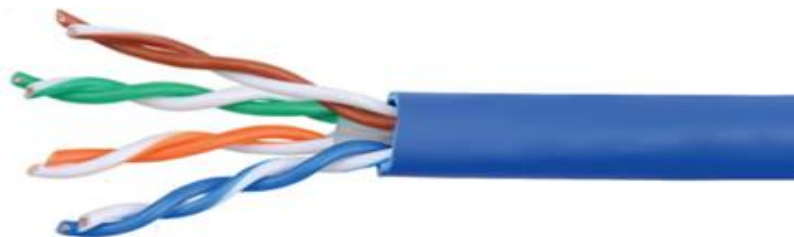


Reference Standards

- International: IEC 61156-5 edit 2.0
- North American: TIA-568-C.2 Cat.6

Reference Standards

Delta EC



Reaction to fire classification

Cables for use in construction works reaction to fire class E_{ca}

Physical dimensions

1- Conductor

Size: 23AWG
Type: Solid bare copper
Diameter: 0.55± 0.01 mm

2- Insulation

Type: PE
Diameter: 0.973± 0.05 mm
Min. thickness: 0.186 mm

3- Cable core

Color code pair 1: Blue / White – Blue strip

**25 Years System
Warranty**

Color code pair 2: Orange / White – Orange strip
Color code pair 3: Green / White – Green strip
Color code pair 4: Brown / White – Brown strip

4- Central Element

Type: PE cross separator

5- Jacket

Type: PVC

Overall Diameter: 6.1 ± 0.3

Technical Data - Physical

1- Cold bend test

$-20 \pm 2^{\circ}\text{C}$ x 4hrs no. crack

2- Dielectric strength

AC 1.7 KV for 2S

3- Insulation

Before Aging – Min. Tension strength: 2400 psi

Before Aging – Min. elongation: 300 %

After Aging – 75% before aging (100°C x 48hrs)

After Aging – 75% before aging (100°C x 48hrs)

4- Jacket

Before Aging – Min. Tension strength: 2000 psi

Before Aging – Min. elongation: 100 %

After Aging – 75% before aging (100°C x 168hrs)

After Aging – 50% before aging (100°C x 168hrs)

5- Min. bending radius: 50 mm

6- Max. pulling tension: 25 lbs.

7- Installation temperature: -10°C to $+60^{\circ}\text{C}$

8- Operating temperature: -10°C to $+60^{\circ}\text{C}$

9- PACKING: 305/500/1000m on a wooden drum overall wrapped over by PE film

10- Marking : Fumo Telecommunications Golden Link GLCAU6P- UTP 23AWG CAT6 PVC EC Verified ISO/IEC 11801 TIA/EIA 568C.2 ccc METER **Made in Taiwan (Plastic drum)**

TECHNICAL DATA - ELECTRICAL

1. Conductor resistance ($\Omega/100\text{m}$ @ 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	$4 \leq f \leq 250\text{MHz}$
5. Insertion Loss (dB/100m)	Max.	$1.82 \cdot \sqrt{f} + 0.0169 \cdot f + 0.25/\sqrt{f}$	$1 \leq f \leq 250\text{MHz}$



6. Pair to Pair NEXT (dB/100m)	Min.	$75.3 - 15 * \log(f)$	$1 \leq f \leq 250\text{MHz}$
7. PowerSum pr-pr NEXT (dB/100m)	Min.	$72.3 - 15 * \log(f)$	$1 \leq f \leq 250\text{MHz}$
8. ELFEXT (dB/100m)	Min.	$68 - 20 * \log(f)$	$1 \leq f \leq 250\text{MHz}$
9. PowerSum ELFEXT (dB/100m)	Min.	$65 - 20 * \log(f)$	$1 \leq f \leq 250\text{MHz}$
10. Return Loss (dB)	Min.	$20 + 5 * \log(f)$	$1 \leq f < 10\text{MHz}$
		25	$10 \leq f < 20\text{MHz}$
		$25 - 7 * \log(f / 20)$	$20 \leq f \leq 250\text{MHz}$
11. Propagation Delay (ns/100m)	Max.	$534 + 36 / \sqrt{f}$	$1 \leq f \leq 250\text{MHz}$
12. Input Impedance (Ω)		$100 \pm 15\%$	$1 \leq f \leq 100\text{MHz}$
		$100 \pm 22\%$	$100 < f \leq 250\text{MHz}$

IEC 61156-5 ed2.0 Category 6 horizontal cable parameters

Frequency [MHz]	Insertion Loss (dB/100m) Max.	RL (Return Loss) [dB] Min.	Pair to Pair NEXT (dB/100m) Min.	Pair to Pair ELFEXT (dB/100m) Min.	Power Sum NEXT (dB/100m) Min.	Power Sum ELFEXT (dB/100m) Min.	Po. Delay (ns/100) Max.
1	2.1	20	75.0	68.0	72.3	65.0	570.0
4	3.8	23	66.3	56.0	63.3	53.0	552.0
10	6.0	25	60.3	48.0	57.3	45.0	545.4
16	7.6	25	57.2	43.9	54.2	40.9	543.0
20	8.5	25	55.8	42.0	52.8	39.0	542.0
31.25	10.7	23.6	52.9	38.1	49.9	35.1	540.4
62.5	15.5	21.5	48.4	32.1	45.4	29.1	538.6
100	19.9	20.1	45.3	28.0	42.3	25.0	537.6
200	29.1	18	40.8	22.0	37.8	19.0	536.5
250	33.0	17.3	39.3	20.0	36.3	17.0	536.3

Note1: All tests include 401 points swept frequency measurements

Note2: All electrical characteristics are given at 20°C

PRODUCT Family

GLCAU6P-B	Blue
GLCAU6P-GY	Gray
GLCAU6P-W	White
GLCAU6P-OW	Off White
GLCAU6P-GN	Green
GLCAU6P-Y	Yellow

**25 Years System
Warranty**

The information contained within this document must not be copied, reprinted or reproduced in any form. Either wholly or in part, without the written consents of Fumo. The information is believed correct at the time of issue. Fumo reserves the right to amend this specification without notice. Specification is not contractually valid unless specifically authorized by Fumo.

