

**DESCRIPTION**

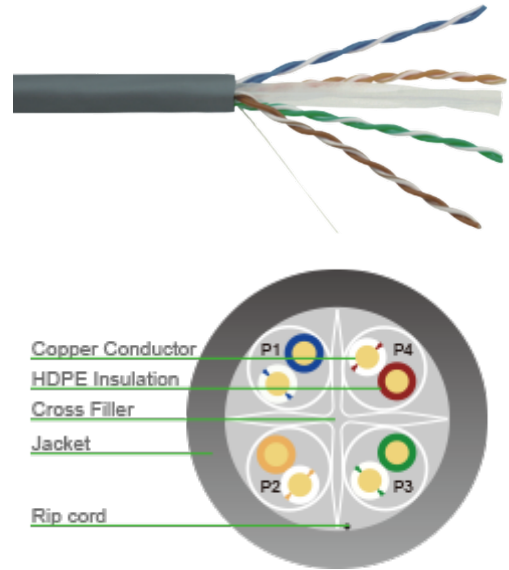
VIVANCO Category 6 U/UTP cables are manufactured and tested to the TIA/EIA 568-C.2, EN50173-1 and ISO/ IEC 11801 Category 6 specifications. Each cable consists of 8 color coded 23AWG polyethylene insulated conductors. These are twisted together to form 4 pairs with varying lay lengths. These pairs are then formed around a central 'X' shaped polyethylene filler. This filler assists in maintaining and enhancing the cables performance.

**FEATURES & BENEFITS**

- Features 25 Year System Warranty
- Fast Feed Reelex Packaging
- Category 6 Compliant TIA/EIA 568-C.2-1, EN50173-1 • ISO/IEC 11801
- Operating Frequency 250MHz
- EC Verified
- Zero halogen, no corrosive gases IEC 60754-1(LSZH)
- Flame propagation IEC 60332-1(LSZH)
- Smoke density IEC 61034-1(LSZH)

**TYPICAL APPLICATIONS**

- 1000BASE-T Gigabit Ethernet
- POE Applications
- 100BASE-TX Fast Ethernet
- VOIP Applications
- 622 Mbps ATM
- Composite Video



**Color**

- P1:** Blue-White/Blue
- P2:** Orange-White/Orange
- P3:** Green-White/Green
- P4:** Brown-White/Brown

<b>Type</b>			U/UTP CAT6 4x2x23AWG
<b>Construction</b>			Dimensions
<b>Conductor</b>	<b>Structure AWG</b>	<b>AWG</b>	23
	<b>Material</b>	-	Bare Copper
	<b>Diameter</b>	<b>mm</b>	0.56+/-0.008
<b>Insulation</b>	<b>Material</b>	-	HDPE
	<b>Diameter</b>	<b>mm</b>	1.0±0.05
	<b>Average Thickness</b>	<b>mm</b>	0.22±0.05
<b>Twist</b>	<b>Direction</b>	-	S
<b>Fillers</b>	<b>Material</b>		PE
<b>Jacket</b>	<b>Material</b>	-	CM. LSZH. PVC.PE
	<b>Diameter</b>	<b>mm</b>	6.1±0.3
	<b>Average Thickness</b>	<b>mm</b>	0.55±0.1
	<b>Marking</b>	-	VIVANCO SYSTEM COPPER CABLE ***** ** U/UTP CAT 6 4PAIRS 23AWG ANSI/TIA-568-C.2 ***** 001-305M
<b>Installation Temperature Range</b>			0°C ~+50°C
<b>Operating Temperature Range</b>			- 20°C ~+60°C



**MECHANICAL CHARACTERISTICS**

Cable under the minimum tension		≥100N
Conductor elongation		≥15%
Jacket before Aging (LSZH)	Tensile Strength	≥10Mpa
	Elongation	≥125%
Jacket After Aging (LSZH)	Tensile Strength	≥8Mpa
	Elongation	≥100%
Minimum Bend Radius		8x during installation

**ELECTRICAL CHARACTERISTICS**

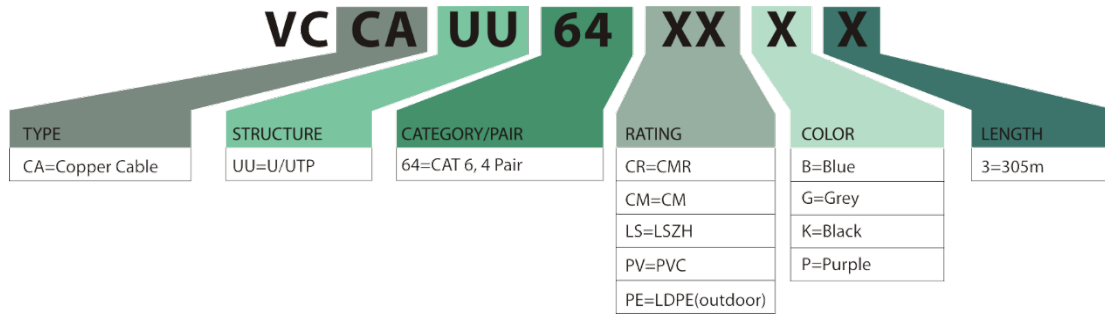
DC Resistance Unbalance (%):	Max 2.5
DC Resistance 20°C	≤93.8 ( Ohms/Km)
Insulation Resistance	>5000MΩ×Km
Dielectric strength	DC 2500V 2S
Mutual Capacitance of a Pair	Max 5.6 nF/100m
Operating Voltage	Max 48V
NVP	68%

**NOMINAL TRANSMISSION CHARACTERISTICS**

	Impedance	IL	RL	DOPr	SKEW	NEXT	PS NEXT	ACR-F	PS ACR-F
Freq.	in dB/100m	dB	dB	ns/100m	ns/100m	dB	dB	dB	dB
in MHz		Max.	Min.	Max.	Max.	Min.	Min.	Min.	Min.
1	100±15	2	20	570	45	74.3	72.3	67.8	64.8
4	100±15	3.8	23	552	45	65.3	63.3	55.8	52.8
8	100±15	5.3	24.5	547	45	60.8	58.8	49.7	46.7
10	100±15	6	25	545	45	59.3	57.3	47.8	44.8
16	100±15	7.6	25	543	45	56.2	54.2	43.7	40.7
20	100±15	8.5	25	542	45	54.8	52.8	41.8	38.8
25	100±15	9.5	24.3	541	45	53.3	51.3	39.8	36.8
31.25	100±15	10.7	23.6	540	45	51.9	49.9	37.9	34.9
62.5	100±15	15.4	21.5	539	45	47.4	45.4	31.9	28.9
100	100±15	19.8	20.1	538	45	44.3	42.3	27.8	24.8
200	100±15	29	18	537	45	39.8	37.8	21.8	18.8
250	100±15	32.8	17.3	536	45	38.3	36.3	19.8	16.8

Note: The above transmission performance for the 100M, 20 ± 2 °C under the conditions tested

NAME CODING



ORDERING INFORMATION

Part No	Description	Packaging	Length
VCCA64CMB3	VIVANCO CAT 6 Unshielded U/UTP 23AWG-CM BLUE	Fast Feed Reelex	305M
VCCA64LSP3	VIVANCO CAT 6 Unshielded U/UTP 23AWG-LSZH PURPLE	Wooden drum	305M
VCCA64PVG3	VIVANCO CAT 6 Unshielded U/UTP 23AWG-PVC GRAY	Fast Feed Reelex	305M
VCCA64PEK3	VIVANCO CAT 6 Unshielded U/UTP 23AWG-PE BLACK	Wooden drum	305M

Note: In this specification, we just list our standard length, color and jacket type, but we can customize as well.