

# Product Specification

## STANDARD COMPLIANCES:

All Proposed Category 7 requirements as per ANSI/TIA, ISO/IEC, and CENELEC EN Standards.

ANSI/TIA-568-B.2-1 CAT.7

ISO/IEC 2<sup>nd</sup> Edition 11801 CLASS F

CENELEC EN 50173-1

CENELEC 2<sup>nd</sup> Edition EN 50288-4-1, IEC 61156-5 for horizontal cable

Flame Retardancy is verified according to IEC 60332-1-2.

We implemented RoHS compliance for the requirement of European Union issued Directive 2002/95/EC

## CONSTRUCTION & CHARACTERISTICS:

Conductor	Material / Size	Bare Copper / 23 AWG	
Insulation	Material	Foam-Skin PE	
	Thickness	Nominal : 0.419 mm	
	Diameter	Nominal : 1.42 mm	
	Colors	Blue/White	Orange/White
		Green/White	Brown/White
	Elongation	Min. 150 %	
Tensile Strength	Min. 0.51 Kg/mm <sup>2</sup>		
Inner-Shield	Aluminum-Mylar	An aluminum foil screen around each pair	
Braid	Material	Tinned Copper / In accordance with the norms of production	
Jacket	Material	PVC	
	Thickness	Nominal : 0.50 mm	
	Diameter	7.4 ± 0.3 mm	
	Color	Assorted upon request	
	Elongation	Min. 100%	
	Tensile strength	Min. 1.407 Kg/mm <sup>2</sup>	
	Aging at 100°C for 168Hrs	Min. elongation retention:50% Min. tensile strength retention:75%	
Marking	CAT.7 SSTP INSTALLATION CABLE 3P VERIFIED to ANSI/TIA-568-B.2-1 & ISO/IEC 11801 ED.2 & IEC 61156-5 & EN 50288-4-1 & EN 50173-1 & IEC 60332-1-2 23AWGx4P TYPE CM (UL) c(UL) xx°C E164469-xx [XXXXXM]		
	or as customer request.		
Flame Test	Burning five times, every time is less than 60 second and paper flag can't be burned.		

Rev. Date: 2009-4-9

Version: A/4



1275 Danner Drive Aurora, Ohio 44202  
Tel: 1-800-626-7801 Fax: 330-562-1999  
www.vpi.us sales@vpi.us

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## APPROVALS:

- 3P Certified ISO/IEC 11801, 2<sup>nd</sup> Edition & EN 50173-1 Category 7 Testing performance requirements.

## APPLICATIONS:

- 10GBASE-T Ethernet
- 1000BASE-Tx Gigabit Ethernet
- 10BASE-T, 100BASE-T Fast Ethernet (IEEE 802.3)
- 100 VG - AnyLAN (IEEE802.12), 155/622 Mbps ATM
- 550 MHz Broadband Video

## ELECTRICAL PERFORMANCE:

Spark Test		1050 V ac		
Dielectric Strength		2500 V dc / 3 seconds		
Insulation Resistance Test		Min. 150 MΩ/Km		
Conductor Resistance		Max.9.38 Ω/100m at 20°C		
Resistance Unbalance		Max. 2%		
Capacitance Unbalance		Max. 160 pF/100m		
Mutual Capacitance		Max. 5600 pF/100m		
Impedance	64kHz	125Ω ± 20%		
	1~250MHz	100Ω ± 15%		
	300~600MHz	100Ω ± 25%		
Attenuation & Near End Cross Talk	Frequency (MHz)	Attenuation (dB/100 meters at 20°C), Max.	NEXT (dB), Min.	Power Sum (dB), Min.
	1MHz	2.0*	80.0*	77.0*
	4MHz	3.7*	80.0*	77.0*
	10MHz	5.9*	80.0*	77.0*
	16MHz	7.4*	80.0*	77.0*
	20MHz	8.3*	80.0*	77.0*
	31.25MHz	10.4*	80.0*	77.0*
	62.5MHz	14.9*	75.5*	72.5*
	100MHz	19.0*	72.4*	69.4*
	155MHz	24.0*	69.5*	66.5*
	200MHz	27.5*	67.9*	64.9*
	300MHz	34.2*	65.2*	62.2*
600MHz	50.10*	60.7*	57.7*	

The asterisk (\*) value are for information only. The minimum Next coupling loss for any pair combination at room temperature is to be greater than the value determined using the formula:

$$\text{NEXT}(f \text{ MHz}) \geq \text{NEXT}(0.772) - 15 \text{LOG}_{10}(f \text{ MHz}/0.772) \text{ dB}$$

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