

NETWORK CABLE

305m 24AWG PVC Solid **CAT5e Network Cable - U-UTP** / 4 Pair

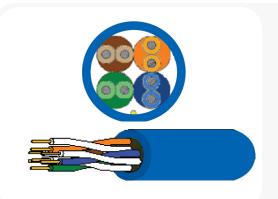
Ordering Information				
Part no.	Colour			
C5-305-SL/PVBLU	Blue			
C5-305-SL/PVGRY	Grey			





Application

For horizontal network and voice application in a structured cabling system, including digital video, broadband & baseband analog video.



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. Overall jacket with PVC compound.

REFERENCE STANDARDS

COMPLIES WITH ALL CATEGORY 5E REQUIREMENTS AS PER ANSI/TIA-568-B.2 CATE 5E, ISO/IEC 11801 (CLASS D) & CENLEC EN50173-1 STANDARDS. CONFORMS TO IEC 61156-5, CENLEC EN 50288-3-1 HORIZONTAL CABLE. FLAME RETARDANCY IS VERIFIED IN ACCORDANCE TO IEC 60332-1. ROHS COMPLIANCE FOR THE REQUIREMENT OF EUROPEAN UNION ISSUED DIRECTIVE 2002/95/EC. CERTIFIED TO AS/ACIF S008:2011

COMPLIANCE

Delta EC, ETL, RCM

CABLE DESCRIPTION					
1 - CONDUCTOR Size Type Diameter (mm)		24AWG Solid bare copper 0.49 ± 0.01			
2 – INSULATION	Type Diameter (mm) Min. thickness (mm)	PE 0.86 ± 0.05 0.15			

CABLE DESCRIPTION			
3 – PAIRS	Color code		
		Pair 1 -	Blue / White – blue strip
		Pair 2 -	Orange / White – orange strip
		Pair 3 -	Green / White – green strip
		Pair 4 -	Brown / White – brown strip
4 – JACKET			
	Type		PVC
	Overall Diameter	(mm)	5.0 ± 0.3

1. Cold bend test	-20 ± 2°C X 4 hrs no. crack		
2. Dielectric strength	AC 1.2 KV/min.		
3.Insulation	Before Aging	After aging	
Min. Tension strength (psi)	2400	75% before aging (100 °C X 4 8hrs)	
Min elongation (%)	300	75% before aging (100 °C X 4 8hrs)	
4. Jacket			
Min. Tensions trength (psi)	2000	85% before aging (100 °C X 168 hrs)	
Min elongation (%)	100	50% before aging (100 °C X 168 hrs)	
5. Min. bending radius (mm)	40		
6. Max. pulling tension (lbs)	40		
7. Install ation temperature	-10°C t o +60°C		
8. Operating temperature	-10 °C t o +60°C		

PACKING:

305m cable roll packed in a Cardboard Pull Box

TECHNICAL DATA - ELECTRICAL					
1. Conductor resistance ($\Omega/100$ 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 ≤ f ≤ 100MHz		
5. Insertion Loss (dB/100m)	Max.	1.967 *√f + 0.023 * f +0.1/√f	1 ≤ f ≤ 100MHz		
6. Pair to Pair NEXT (dB/100m)	Min.	65.3 - 15 * log(f)	1 ≤ f ≤ 100MHz		
7. PowerSum pr-prNEXT (dB/100m)	Min.	62.3 - 15 * log(f)	1 ≤ f ≤ 100MHz		
8. ELFEXT (dB/100m)	Min.	64 - 20 * log(f)	1 ≤ f ≤ 100MHz		
9. PowerSum ELFEXT (dB/100m)	Min.	61 – 20 * log(f)	1 ≤ f ≤ 100MHz		
10 . Return Loss (dB)	Min.	20 + 5 * log(f)	1 ≤ f < 10MHz		
		25	10 ≤ f < 20MHz		
		25 - 7 * log(f / 20)	20 ≤ f ≤100MHz		
11 . Propagation Delay (ns/100m)	Max.	534 + 36 /√f	1 ≤ f ≤ 100MHz		
12 . Input Impedance (Ω)		100 ± 15%	1 ≤ f ≤ 100MHz		

IEC 61156-5 ed2.0 Category 6 Horizontal cable parameters							
		Pair to Pair		Power Sum			
Freq. (MHz)	Ins. Loss (dB/100m)	RL (dB)	NEXT	ELFEXT	NEXT	ELFEXT	Po. Delay (ns/100)
			(dB/100m)		(dB/100m)		
М	ax.	Min.	Min.	Min.	Min.	Min.	Max.
1	2.1	20	65.3	64.0	62.3	61.0	570.0
4	4.1	23	56.3	52.0	53.3	49.0	552.0
10	6.5	25	50.3	44.0	47.3	41.0	545.4
16	8.3	25	47.2	39.9	44.2	36.9	543.0
20	9.3	25	45.8	38.0	42.8	35.0	542.0
31.25	11.7	23.6	42.9	34.1	39.9	31.1	540.4
62.5	17.0	21.5	38.4	28.1	35.4	25.1	538.6
100	22.0	20.1	35.3	24.0	32.3	21.0	537.6

Note1: All tests include 401 points swept frequency measurements.

Note2: All electrical characteristics are given at 20°C