

**SECURITY & MISC CABLE – COMPOSITE**

**Part Number : UTPL5ECOM24**

**Spec Reference TEM0635-2008**

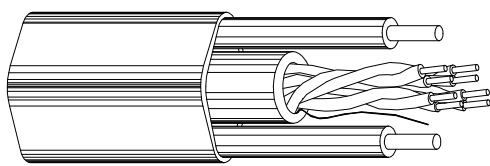
**Description : Unshielded Twisted Pair, 24AWG PACW, 4 Pair, Polyolefin Insulation, Rip Cord, PVC Inner Sheath. Stranded PACW 19AWG, 2 Core , PVC insulated, PVC Outer Sheath,**

**Applicable Standards: N/A**

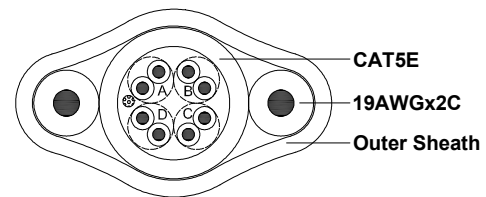
**Suitable Applications: For Data Transmission & Low Voltage Power Connection.**



*Cable Construction drawing / photo*



*Relative parts of the cable construction*



**Cable Description**

**LAN Cable Cat5e**

Conductor	AWG	Stranding	Area (mm <sup>2</sup> )	Diameter (mm)	Material
	24	1/0.503mm	0.20	0.503	PACW
Dielectric	Material : Thermoplastic Polyolefin Pair Colour : Blue / White-Blue Stripe, Orange / White-Orange Stripe, Green / White-Green Stripe, Brown / White-Brown Stripe Nominal Thickness (mm) : 0.18 Nominal OD (mm) : 0.92				
Filler	Material : Rip Cord				
Inner Sheath	Material : PVC Colour : Blue Nominal Thickness (mm) : 0.64 Nominal OD (mm) : 5.4				

**19AWG Twisting Pair**

Conductor	AWG	Stranding	Area (mm <sup>2</sup> )	Diameter (mm)	Material
	19	24/0.2mm	0.75	1.13	PACW
Insulation	Core : 2 Material : PVC Colour : Red, Black Nominal Thickness (mm) : 0.75 Nominal OD (mm) : 2.7				
Outer Sheath	Material : PVC Colour : Black Nominal Thickness (mm) : 0.7 Nominal OD (mm) : 7.0 x 12.4				

## Electrical Properties

### 19AWG Twisting Pair

Max. Conductor DC Resistance @ 20°C	27.5Ω/km
Voltage Test: Core to Core	2kV ac/1min
Voltage Test: Core to Shield	N/A

### LAN Cable Cat5e

Nom. Mutual Capacitance @ 1KHz	56pF/m
Max. Capacitance Unbalance @ 20°C	330 pF/100m
Nominal Velocity of Propagation	64%
Max. Conductor. DC Resistance @ 20°C	9.38Ω/km
Max. DC Conductor resistance unbalanced	5%

Test Item	Specification Value		Test Item	Specification Value	
Min. Structural Return Loss (SRL) (dB/100m, 20°C)	MHz	dB	Min. Return Loss (RL) (dB/100m, 20°C)	MHz	dB
	0.772	***		0.772	***
	1.0	23		1.0	20.0
	4.0	23		4.0	23.0
	8.0	23		8.0	24.5
	10.0	23		10.0	25.0
	16.0	23		16.0	25.0
	20.0	23		20.0	25.0
	25.0	22		25.0	24.3
	31.25	21		31.25	23.6
	62.5	18		62.5	21.5
	100.0	16		100.0	20.1
Test Item	Specification Value		Test Item	Specification Value	
Max. Insertion Loss (IL) (dB/100m, 20°C)	MHz	dB	Min. Near End Cross-talk (NEXT) (dB/100m, 20°C)	MHz	dB
	0.772	1.8		0.772	67.0
	1.0	2.0		1.0	65.3
	4.0	4.1		4.0	56.3
	8.0	5.8		8.0	51.8
	10.0	6.5		10.0	50.3
	16.0	8.2		16.0	47.2
	20.0	9.3		20.0	45.7
	25.0	10.4		25.0	44.3
	31.25	11.7		31.25	42.9
	62.5	17.0		62.5	38.4
	100.0	22.0		100.0	35.3

Test Item	Specification Value		Test Item	Specification Value	
Min. Power Sum Near-End Cross-talk (PSNEXT) (dB/100m, 20°C)	MHz	dB	Min. Far End Cross-talk (ELFEXT) (dB/100m, 20°C)	MHz	dB
	0.772	64.0		0.772	66.0
	1.0	62.3		1.0	63.8
	4.0	53.3		4.0	51.8
	8.0	48.8		8.0	45.7
	10.0	47.3		10.0	43.8
	16.0	44.2		16.0	39.7
	20.0	42.8		20.0	37.8
	25.0	41.3		25.0	35.8
	31.25	39.9		31.25	33.9
	62.5	35.4		62.5	27.9
	100.0	32.3		100.0	23.8
	Test Item	Specification Value		Test Item	Specification Value
Min. Power Sum Far End Cross-talk (PSELFEXT) (dB/100m, 20°C)	MHz	dB	Max. Propagation Delay (PD) (ns/100m, 20°C)	MHz	dB
	0.772	63.0		1.0	570
	1.0	60.8		10.0	545
	4.0	48.8	100.0	538	
	8.0	42.7	Max. Propagation Delay Skew (PD) ( ns/100m, 20°C )	MHz	dB
	10.0	40.8		1.0	45
	16.0	36.7		10.0	45
	20.0	34.7		100.0	45
	25.0	32.8			
	31.25	30.9			
	62.5	24.9			
	100.0	20.8			

### Mechanical Properties

Operating Temperature Range	-15°C to +70°C
Max. Recommended Pulling Tension (N)	N/A
Min. Bend Radius (install)	70mm
Approximate Mass	10.1kg/100m
Sheath Printing	N/A

### Supply Information

Pack Size	Pack Type	Dimension	Weight	Qty Per Pack	Qty Per Pallet
100m					
250m	Wooden Reel	W40 x H27.4cm	28kg	1R	12R
300 / 305m					
500m					
1000					
Other					

Document Change Record	Issue	Date	Prepared by	Approved by
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	Issue	Change		