



NEX1 Technologies Co., Ltd

# SPECIFICATION FOR APPROVAL

DOCUMENT : TUP2404P01

STYLE : 75 300V  
COMMUNICATION CABLE

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SIZE: UTP 24AWG X4P (SOLID)  
NEX1 350 CAT 5e CMP

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RECOGNIZED: UL. CSA.ETL.

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Manufactured by:

NEX1 Technologies Co., Ltd.  
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# SPECIFICATIONS

STYLE	75 300V COMMUNICATION CABLE	DOCUMENT NO : TUP2404P01
SIZE	UTP 24AWG×4P	ESTABLISHED DATE : 2007/3/16
STANDARD : UL444,910 & ISO/IEC 11801 & TIA/EIA-568-A-5 CAT 5e APPLICATION : HIGH PERFORMANCE LAN CABLE ARE SUITABLE FOR PERFECT AUDIO DATA AND VIDEO OF TRANSFER FOR HORIZONTAL NETWORK CONSTRUCTION :		
CONDUCTOR	SIZE	24AWG × 4P
	CONSTRUCTION	SOLID BARE COPPER
	COND. DIAM.	1.0/0.515±0.008 mm
INSULATION	AVG. THICK.	0.182 mm
	MIN. THICK.	0.171 mm
	DIAMETER	0.880 ± 0.020 mm
	MATERIAL	FEP
	COLOR CODES	1. BLUE × WHITE/BLUE RING 2. ORANGE × WHITE/ORANGE RING 3. GREEN × WHITE/GREEN RING 4. BROWN × WHITE/BROWN RING
SHIELDED	PAIR STRANDED	2 CORES STRANDED
	FILLER (SLOT)	-----
	ASSEMBLY STRANDED	4 PAIR STRANDED
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JACKETED	AVG. THICK.	0.42 mm
	MIN. THICK.	0.38 mm
	DIAMETER	4.70 ± 0.20 mm
	MATERIAL	PVC
	COLOR	GRAY OR OTHER COLOR

AK001/210×297/1.0

EDITION : 1.0

REVISED DATE: March 16, 2007

MAKER : *C. Y. Chen*      CONFIRM : *S. N. Wong*      APPROVAL : *W. J. Wang*



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ELECTRICAL & PHYSICAL PROPERTIES :			
ITEM		24AWG × 4P	
RATING TEMP VOLTAGE		75 300V	
CONDUCTOR RESISTANCE		93.8 OHM/Km/20 MAX.	
MUTUAL CAPACITANCE		56 pF/M MAX.	
DIELECTRIC STRENGTH		AC 1.5 KV/2 SEC..	
SPARK TEST		2.5 KV	
INSULATION	UNAGED	TENSILE STRENGTH	2500 PSI MIN. (1.76 Kg/mm)
		ELONGATION	200% MIN.
	AGED	TENSILE STRENGTH	UNAGED MIN. 75%(232 ×168HRS)
		ELONGATION	UNAGED MIN. 75%(232 ×168HRS)
JACKETED	UNAGED	TENSILE STRENGTH	2000 PSI MIN.(1.41 Kg/m m <sup>2</sup> )
		ELONGATION	100% MIN.
	AGED	TENSILE STRENGTH	UNAGED MIN. 85%(100 ×240HRS)
		ELONGATION	UNAGED MIN. 50%(100 ×240HRS)
INSULATION SHRINKBACK		150m/m, 121 ± 1HR 9.5m/m	
COLD BEND TEST		-20 1HR NO.CRACK	
FLAME RETARDANT TEST		CMP	
AC LEAKAGE CURRENT THROUGH OVERALL JACKET		AC 1500V 10 mA	
DC RESISTANCE UNBALANCE		5% MAX.	
PAIR-TO-GROUND CAPACITANCE UNBALANCE		3300 pF/Km MAX.	
CHARACTERISTIC IMPEDANCE		1 ~ 350 MHz 100±15 OHMS	
STRUCTURAL RETURN LOSS		350 MHz 10.6dB MIN.	
PROPAGATION DELAY		350 MHz 536nS/100m MAX.	
DELAY SKEW		1 ~ 350 MHz 40nS/100m MAX.	
MARKING :			
NEX1 350 ENHANCED CATEGORY CABLE TESTED TO 350MHz FOR GIGABIT SYSTEM E142890 (UL) CMP 75 UTP 4PR 24AWG CSA CMP LL43774 ETL VERIFIED TO TIA/EIA-568-A-5 CAT 5e XXXXXXFT			

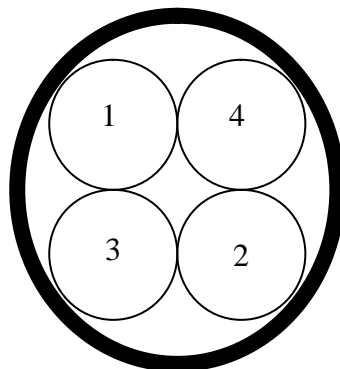


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## Electrical Performance

ITEM(d B) Frequency (MHz)	ATT MAX. (dB/100 m)	NEXT MIN. (d B)	ACR MIN. (dB)	PS. NEXT MIN. (dB)	PS. ACR MIN. (dB)	ELFEXT MIN. (dB/100 m)	PS. ELFEXT MIN. (dB/100 m)	R.L. MIN. (d B)
1	2.0	68.3	66.3	66.3	64.3	63.8	60.8	20.0
4	4.1	59.3	55.2	57.3	53.2	51.7	48.7	23.0
8	5.8	54.8	49.0	52.8	47.0	45.7	42.7	24.5
10	6.5	53.3	46.8	51.3	44.8	43.8	40.8	25.0
16	8.2	50.3	42.1	48.3	40.1	39.7	36.7	25.0
20	9.3	48.8	39.5	46.8	37.5	37.8	34.8	25.0
25	10.4	47.3	36.9	45.3	34.9	35.8	32.8	24.3
31.25	11.7	45.9	34.2	43.9	32.2	33.9	30.9	23.6
62.5	17.0	41.4	24.4	39.4	22.4	27.8	24.8	21.5
100	22.0	38.3	16.3	36.3	14.3	23.8	20.8	20.1
155	28.1	35.5	7.4	33.5	5.4	20.0	17.0	18.8
200	32.4	33.8	1.4	31.8	0	17.7	14.7	18.0
240	36	32.6	N.A	30.6	N.A	16.2	13.2	17.4
300	41	31.2	N.A	29.2	N.A	14.2	11.2	16.8
350	44.9	30.1	N.A	28.1	N.A	12.9	9.9	16.3



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