



NEX1 Technologies Co., Ltd

SPECIFICATION FOR APPROVAL

DOCUMENT? TCM2304X05

STYLE : 75 300V
COMMUNICATION CABLE

SIZE: S/FTP 23AWG X4P (SOLID)
NEX1 1000X CAT 6 CM

RECOGNIZED: UL. CSA. ETL. 3P

Manufactured by:

NEX1 Technologies Co., Ltd.
No.6, Lane 252, Min-Tsu E. Road, Taipei 104, Taiwan
www.nex1.com.tw



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STYLE	75 300V COMMUNICATION CABLE	DOCUMENT NO : TCM2304X05
SIZE	S/FTP 23AWG×4P	ESTABLISHED DATE : 2007/3/16
STANDARD : UL444 & prEN50288-5-1 & ISO/IEC 11801 & TIA/EIA-568-B.2.1 CAT 6 APPLICATION : ULTRA HIGH PERFORMANCE LAN CABLE ARE SUITABLE FOR PERFECT AUDIO DATA AND VIDEO OF TRANSFER FOR HORIZONTAL NETWORK CONSTRUCTION :		
CONDUCTOR	SIZE	23AWG × 4P
	CONSTRUCTION	SOLID BARE COPPER
	COND. DIAM.	1.0/0.600±0.008 mm
INSULATION	AVG. THICK.	0.230 mm
	MIN. THICK.	0.210 mm
	DIAMETER	1.05 ± 0.020 mm
	MATERIAL	HDPE
	COLOR CODES	BLUE × WHITE/BLUE STRIPE ORANGE × WHITE/ORANGE STRIPE GREEN × WHITE/GREEN STRIPE BROWN × WHITE/BROWN STRIPE
SHIELDED	PAIR STRANDED	2 CORES STRANDED
	FILLER(SLOT)	FRPE ISOLATOR SEPARATOR
	ASSEMBLY STRANDED	4 PAIR STRANDED
	AL-MYLAR TAPE	25 × 0.063 ± 0.005 mm
	DRAIN WIRE	0.510 ± 0.008 mm (TINNED COPPER)
	BRAID	16 / 8 / 0.12 mm
	COVERAGE RATE	73 %
JACKETED	AVG. THICK.	0.60 mm
	MIN. THICK.	0.55 mm
	DIAMETER	7.40 ± 0.20 mm
	MATERIAL	PVC
	COLOR	GRAY OR OTHER COLOR

AK001/210×297/1.0

EDITION : 1.0

REVISED DATE: March 16, 2007

C. Y. Chen No. 8, Lane 252, Min-Tsu E. Road, Taipei 104, Taiwan

S. N. Wong

W. J. Wang

Tel:886-2-2518-1300 Fax:886-2-2501-4209 <http://www.nex1.com.tw>



NEX1 Technologies Co., Ltd

MAKER :

CONFIRM :

APPROVAL :

SPECIFICATIONS

ELECTRICAL & PHYSICAL PROPERTIES :			
ITEM	23AWG × 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/MIN.		
SPARK TEST	2.5 KV		
INSULATION	UNAGED	TENSILE STRENGTH	2400 PSI MIN. (1.69 Kg/m m ²)
		ELONGATION	300% MIN.
	AGED	TENSILE STRENGTH	UNAGED MIN. 75%(100 ×48HRS)
		ELONGATION	UNAGED MIN. 75%(100 ×48HRS)
JACKETED	UNAGED	TENSILE STRENGTH	2000 PSI MIN.(1.41 Kg/m m ²)
		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 ±HR NO.CRACK
FLAME RETARDANT TEST			CM
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 ~ 250 MHz 100±15 OHMS
STRUCTURAL RETURN LOSS			250 MHz 12.0dB MIN.
PROPAGATION DELAY			250 MHz 536nS/100m MAX.
DELAY SKEW			1 ~ 250 MHz 40nS/100m MAX.
MARKING :			
NEX1 1000X E142890 CAT 6 GIGASYSTEM CM 75 S/FTP 4PR 23AWG VERIFIED (UL) CSA ETL AND 3P VERIFIED TO ISO/IEC 11801 XXXXXXFT			

AK001/210×297/1.0



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EDITION : *A.Y. Chen*
 MAKER :

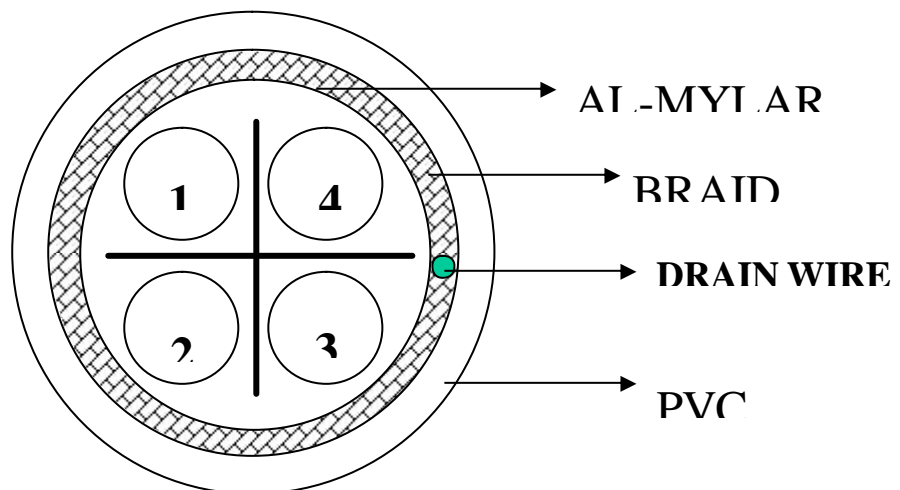
S. Wang REVISION :
 DATE: March 16, 2007 *J. Wang*
 APPROVAL :

CONFIRM :

SPECIFICATIONS

Electrical performance

ITEM(d B) Frequency (MHz)	ATT MAX. (dB/100m)	NEXT MIN. (dB)	ACR MIN. (dB)	PS. NEXT MIN. (dB)	PS. ACR MIN. (dB)	ELFEXT MIN. (dB)/100m)	PS. ELFEXT MIN. (dB/100m)	R.L. MIN. (d B)
1	2.0	76.3	74.3	74.3	72.3	67.8	64.8	20.0
4	3.8	67.3	63.5	65.3	61.5	55.7	52.7	23.0
8	5.3	62.8	57.5	60.8	55.5	49.7	46.7	24.5
10	6.0	61.3	55.3	59.3	53.3	47.8	44.8	25.0
16	7.6	58.3	50.7	56.3	48.7	43.7	40.7	25.0
20	8.5	56.8	48.3	54.8	46.3	41.7	38.7	25.0
25	9.5	55.3	45.8	53.3	43.8	39.8	36.8	24.3
31.25	10.7	53.9	43.2	51.9	41.2	37.9	34.9	23.6
62.5	15.4	49.4	34.0	47.4	32.0	31.8	28.8	21.5
100	19.8	46.3	26.5	44.3	24.5	27.8	24.8	20.1
155	25.1	43.5	18.4	41.5	16.4	23.9	20.9	18.8
200	29.0	41.8	12.8	39.8	10.8	21.7	18.7	18.0
250	32.8	40.3	7.5	38.3	5.5	19.8	16.8	17.3



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REVISOR : *S. Wang* DATE: March 16, 2007. *Wang*

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