

SPECIFICATION FOR APPROVAL

DOCUMENT : LAN-5EUTP-xx

STYLE : 75°C 300V
COMMUNICATION CABLE

SIZE: UTP 24AWG X4P (SOLID)
CAT 5E CM

RECOGNIZED: UL、 3P、 ETL



OFFICE : LMASTER LIMITED, UNIT 1701,
PRESIDENT COMMERCIAL CENTRE
608 NATHAN ROAD, KOWLOON,
HONG KONG

FACTORY : 17 PEI YUAN ROAD,
CHUNG-LI IND. PARK
TAIWAN, R.O.C.

TEL : (852) 2958 0356
FAX : (852) 8208 6179

SPECIFICATION

STYLE	75°C 300V COMMUNICATION CABLE	DOCUMENT NO : LAN-5EUTP-xx
SIZE	UTP 24AWG×4P	ESTABLISHED DATE : Aug/14/2001
STANDARD : UL444 & EN50173 & ISO/IEC 11801 & TIA-568-C.2 CAT 5E		
APPLICATION : HIGH PERFORMANCE LAN CABLE ARE SUITABLE FOR PERFECT AUDIO DATA AND VIDEO OF TRANSFER FOR HORIZONTAL NETWORK		
CONSTRUCTION :		
CONDUCTOR	SIZE	24AWG
	CONSTRUCTION	SOLID BARE COPPER
	COND. DIAM.	1/0.494±0.008 mm
INSULATION	AVG. THICK.	0.188 mm
	MIN. THICK.	0.178 mm
	DIAMETER	0.870 ± 0.02 mm
	MATERIAL	HDPE
	COLOR CODES	1.BLUE × WHITE/BLUE STRIPE 2.ORANGE × WHITE/ORANGE STRIPE 3.GREEN × WHITE/GREEN STRIPE 4.BROWN × WHITE/BROWN STRIPE
STRANDED	PAIR STRANDED	2 CORES STRANDED
	ASSEMBLY STRANDED	4 PAIR STRANDED
JACKETED	AVG. THICK.	0.45 mm
	MIN. THICK.	0.41 mm
	DIAMETER	4.80 ± 0.20 mm
	MATERIAL	PVC
	COLOR	GRAY OR OTHER COLOR
	RIP CORD	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
PACKAGING	<input type="checkbox"/> ACCORDING TO CUSTOMER'S REQUEST	
	<input checked="" type="checkbox"/> ACCORDING WITH LANMASTER STANDARD	

AK001/210×297/1.0

EDITION : 1.7

MAKER : *H. C. KUO* CONFIRM : *C. Y. Chen*

REVISED DATE : 2009.11.21

APPROVAL : *W. J. Wang*

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ELECTRICAL & PHYSICAL PROPERTIES :			
ITEM		24AWG × 4P	
RATING TEMP VOLTAGE		75°C 300V	
CONDUCTOR RESISTANCE		9.38 OHM/100m/20°C MAX.	
MUTUAL CAPACITANCE		56 pF/M MAX.	
DIELECTRIC STRENGTH		AC 1.5 KV/2 SEC.	
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°C×48HRS)
		ELONGATION	UNAGED MIN. 75%(100°C×48HRS)
JACKETED	UNAGED	TENSILE STRENGTH	2000 PSI MIN.(1.41 Kg/m m ²)
		ELONGATION	100% MIN.
	AGED	TENSILE STRENGTH	UNAGED MIN. 85%(100°C×240HRS)
		ELONGATION	UNAGED MIN. 50%(100°C×240HRS)
INSULATION SHRINKBACK		150m/m, 121°C±1°C×1HR ≤ 9.5m/m	
COLD BEND TEST		-20°C×4HRS NO.CRACK	
FLAME RETARDANT TEST		CM	
AC LEAKAGE CURRENT THROUGHT OVERALL JACKET		AC 1500V ≤ 10 mA	
DC RESISTANCE UNBALANCE		5% MAX.	
PAIR-TO-GROUND CAPACITANCE UNBALANCE		330 pF/100m MAX.	
CHARACTERISTIC IMPEDANCE		1 ~ 350 MHz 100±15 OHMS	
PROPAGATION DELAY		350 MHz 536nS/100m MAX.	
DELAY SKEW		1 ~ 350 MHz 40nS/100m MAX.	
MARKING :			
LAN-5EUTP-?? LANMASTER C5+ 200Mhz PVC UTP 4X2X24AWG NVP=66% 3P and ETL verified to TIA-568-C.2 CAT 5E DD/MM/YY XXXXXM			

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Electrical Performance

ITEM(dB) Frequency (MHz)	ATT MAX. (dB/100m)	NEXT MIN. (dB)	ACR MIN. (dB)	PS. NEXT MIN. (dB)	PS. ACR MIN. (dB)	ACRF MIN. (dB/100m)	PS. ACRF MIN. (dB/100m)	R.L. MIN. (dB)
1	2.0	65.3	63.3	62.3	60.3	63.8	60.8	20.0
4	4.1	56.3	52.2	53.3	53.2	51.7	48.7	23.0
8	5.8	51.8	46.0	48.8	43.0	45.7	42.7	24.5
10	6.5	50.3	43.8	47.3	40.8	43.8	40.8	25.0
16	8.2	47.3	39.1	44.3	36.1	39.7	36.7	25.0
20	9.3	45.8	36.5	42.8	33.5	37.8	34.8	25.0
25	10.4	44.3	33.9	41.3	30.9	35.8	32.8	24.3
31.25	11.7	42.9	31.2	39.9	28.2	33.9	30.9	23.6
62.5	17.0	38.4	21.4	35.4	18.4	27.8	24.8	21.5
100	22.0	35.3	13.3	32.3	10.3	23.8	20.8	20.1
155	28.1	32.5	4.4	29.5	1.4	20.0	17.0	18.8
200	32.4	30.8	N.A	27.8	N.A	17.7	14.7	18.0
240	36	29.6	N.A	26.6	N.A	16.2	13.2	17.4
300	41	28.2	N.A	25.2	N.A	14.2	11.2	16.8
350	44.9	27.1	N.A	24.1	N.A	12.9	9.9	16.3

