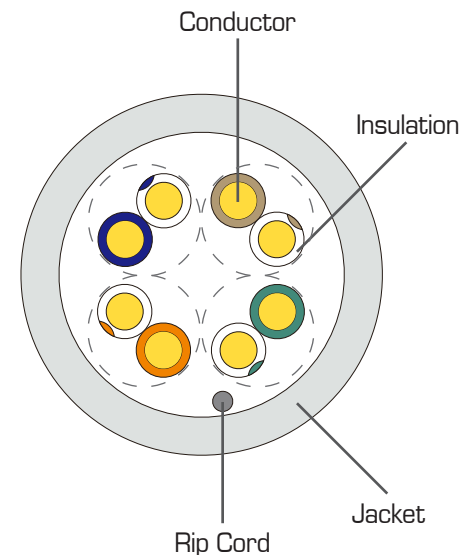


BCLS-1 1GY-3

CAT5E U/UTP LSZH Cable



Kramer's BCLS-1 1GY is a high performance CAT5E U/UTP cable designed for IT, LAN and Ethernet installations. Constructed with 24AWG solid bare copper conductors in a LSZH jacket with internal rip cord and sequential markings every meter and packed in a Reelex II carton for easy to pull-out make this cable exceed CAT5E specifications to provide additional performance and bandwidth over the basic standard



Product Description	CAT5E U/UTP, 24AWG solid bare copper, LSZH. With rip cord.	
Product Features	High performance of transmission. High quality of safety properties. Sweep frequency up to 350 MHz. Reelex II carton and easy to pull out.	
Applications	Structure cabling for horizontal and building backbone cable. Designed for IT, LAN and Ethernet installations. IEEE 802.3u 100BASE-T and legacy speeds. CDDI / ATM / Token Ring IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)	
Applicable Standard	Performance Standards:	
	ANSI/TIA-568-C.2 (2009)	Balanced Twisted-Pair Telecommunications Cabling and Components Standards
	ISO/IEC 11801 (Edition 2.2)	Information technology - Generic cabling for customer premises
	IEC 61156-5 (Edition 2.0)	Multicore and symmetrical pair/quad cables for digital communications - Part 5: Symmetrical pair/quad cables with transmission characteristics up to 1000 MHz - Horizontal floor wiring - Sectional specification
	EN 50288-3-1:2013	Multi-element metallic cables used in analogue and digital communication and control Sectional specification for unscreened cables characterized up to 100 MHz. Horizontal and building backbone cables
	Standards for flammability, acidity and smoke:	
	EN 50173-1:2011	Information technology - Generic cabling systems - Part 1: General requirements
	IEC 60332-1-2	Tests on electric and optical fibre cables under fire conditions - Part 1-2: Test for vertical flame propagation for a single insulated wire or cable - Procedure for 1 kW pre-mixed flame
	IEC 61034-1 / 61034-2	Measurement of smoke density of cables burning under defined conditions
	IEC 60754-2	Test on gases evolved during combustion of materials from cables
	EU Directive 2011/65/EC (RoHS 2)	
	EU Directive 2006/95/EC (LVD)	
	CE compliance date: 2010.01.01	



MATERIAL AND CONSTRUCTION

Conductor	Material	24AWG solid bare copper	
Insulation	Material	Polyolefin (PO)	
	Color code & diameter	Blue & white/blue Stripe	0.87 ± 0.02 mm
		Orange & white/orange stripe	0.86 ± 0.02 mm
		Green & white/green stripe	0.87 ± 0.02 mm
Brown & white/brown stripe		0.86 ± 0.02 mm	
Twisted	Description	Left hand direction	
Assembly	Description	Left hand direction	
Rip cord	Material	Polyester multi-yarn	
Jacket	Material	Low smoke zero halogen (LSZH)	
	Diameter	4.9 ± 0.2 mm	
	Thickness	0.50 ± 0.05 mm	
	Color	Gray[Pantone 427C]	

USAGE & ENVIRONMENTAL CONDITION

Temperature range	Storage & shipping	-20°C to 60°C
	Installation	0°C to 60°C
	Operation	-20°C to 60°C
Minimum bending radius		≥ 4 times of overall diameter
Maximum pulling tension		≤ 110 N

PHYSICAL & ELECTRICAL CHARACTERISTICS (AT 20°C)

Temperature & voltage rating	60°C / 300V
Spark test	2.5 KV DC
AC leakage current through overall jacket	≤ 10mA (1.5KV AC)
Cable cold bend	-20°C for 4 hr
Conductor DC resistance	≤ 9.38 Ω/100m
Resistance unbalance	≤ 5%
Dielectric strength	1.5 KV ac for 2 s
Insulation resistance	≥ 5000 MΩ•m
Mutual capacitance	≤ 5.6 nF/100m
Capacitance unbalance pair-to-ground	≤ 330 pF/100m
Characteristic Impedance	@1~100MHz, 100±15 Ohm
Coupling Attenuation	AT 30 MHz ≤ 55dB; AT 100 MHz ≤ 55dB
Insulation Tensile Strength	2400 PSI MIN. (1.69 Kg/m ²)
NVP	71%

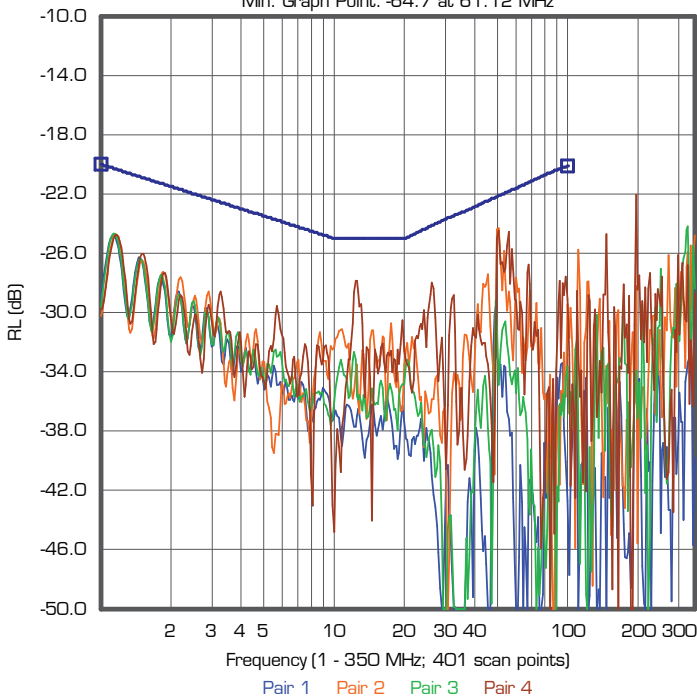
TRANSMISSION PERFORMANCE (AT 20°C)

Freq. MHz	IL	NEXT	PS NEXT	ACR	PS ACR	ACR-F	PS ACR-F	RL	Propagation Delay	Delay Skew
	Max. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Max. ns/100m	Max. ns/100m
1	2.04	70.30	67.30	68.26	65.26	68.80	65.80	20.00	570.00	45.00
4	4.05	61.27	58.27	57.22	54.22	56.76	53.76	23.01	552.00	
8	5.77	56.75	53.75	50.99	47.99	50.74	47.74	24.52	546.73	
10	6.47	55.30	52.30	48.83	45.83	48.80	45.80	25.00	545.38	
16	8.25	52.24	49.24	43.99	40.99	44.72	41.72	25.00	543.00	
20	9.27	50.78	47.78	41.52	38.52	42.78	39.78	25.00	542.05	
25	10.42	49.33	46.33	38.91	35.91	40.84	37.84	24.32	541.20	
31.25	11.72	47.88	44.88	36.15	33.15	38.90	35.90	23.64	540.44	
62.5	16.99	43.36	40.36	26.37	23.37	32.88	29.88	21.54	538.55	
100	21.98	40.30	37.30	18.33	15.33	28.80	25.80	20.11	537.60	
150	27.54	37.66	34.66	10.11	7.11	25.28	22.28	18.87	536.94	
200	32.42	35.78	32.78	3.36	0.36	22.78	19.78	18.00	536.55	
250	36.85	34.33	31.33	N.A.	N.A.	20.84	17.84	17.32	536.28	
300	40.97	33.14	30.14	N.A.	N.A.	19.26	16.26	16.77	536.08	
350	44.85	32.14	29.14	N.A.	N.A.	17.92	14.92	16.30	535.92	

*Values above 100MHz are for information only

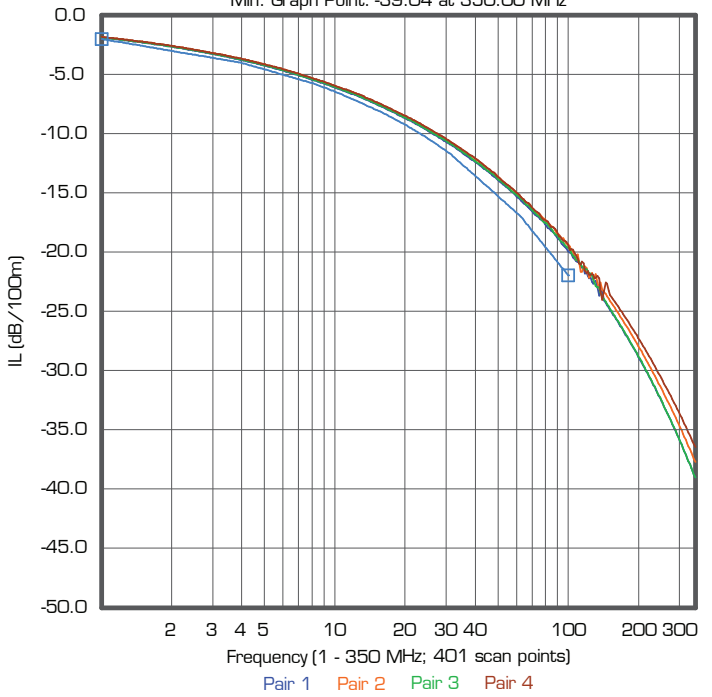
IL vs. Frequency

Max. Graph Point: -22.1 at 196.45 MHz
 Min. Graph Point: -64.7 at 61.12 MHz



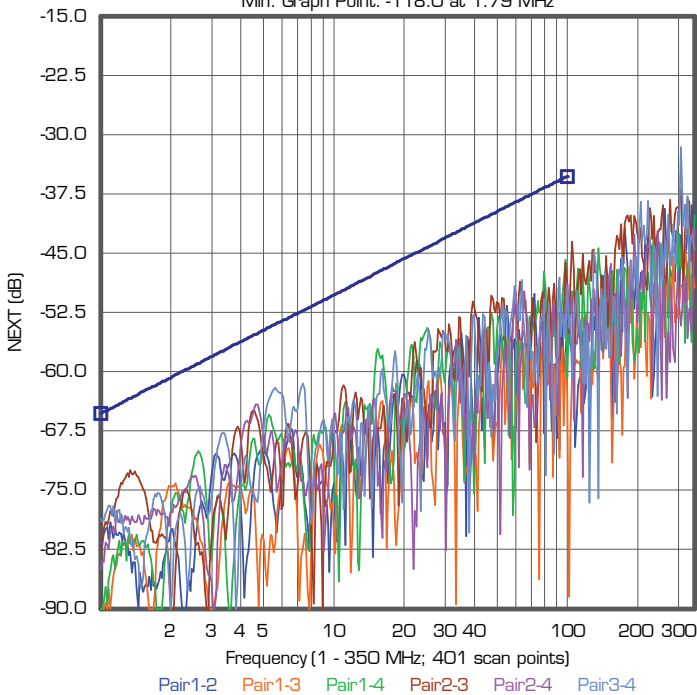
IL vs. Frequency

Max. Graph Point: -1.85 at 1.00 MHz
 Min. Graph Point: -39.04 at 350.00 MHz



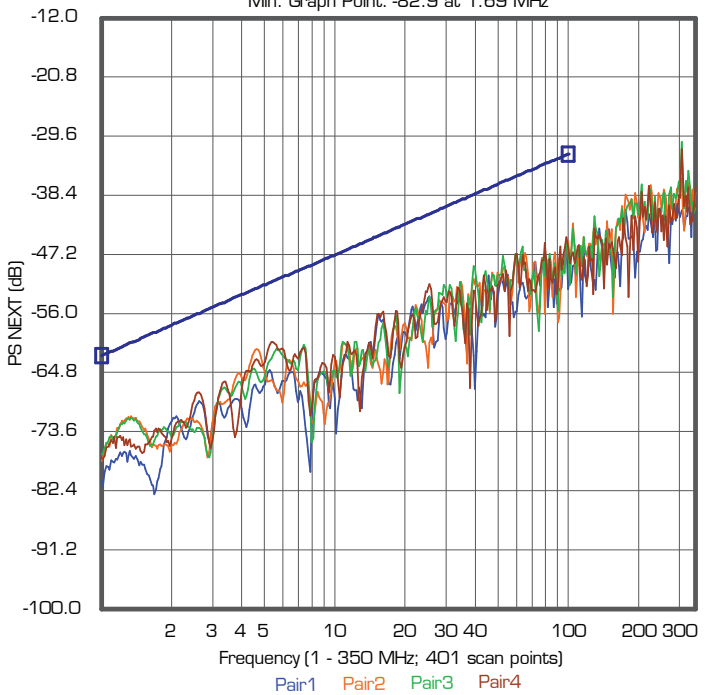
NEXT vs. Frequency

Max. Graph Point: -31.6 at 305.88 MHz
 Min. Graph Point: -118.0 at 1.79 MHz



PS NEXT vs. Frequency

Max. Graph Point: -30.4 at 305.88 MHz
 Min. Graph Point: -82.9 at 1.69 MHz



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SHIPPING INFORMATION:

Item	Dimension	Nominal net weight
Cable	305 m	8.54 kg (18.82 lb)
Reellex II Carton	L353 x W240 x H341 mm	880 g
Pallet	1150 x1150 x120 mm	14.1 kg