



kramer

BCLS-31

CAT 6A U/UTP 23AWG 650MHz Bulk Cable

– Low Smoke & Halogen Free



Kramer's BCLS-31 is a high-performance CAT6A U/UTP cable designed for IT, LAN and Ethernet installations. It is constructed with four pairs of 23AWG solid bare copper conductors with a cross filler in an LSZH jacket with internal rip cord and sequential markings every meter and packed on a fumigated plywood reel. The unique zigzag jacket design provides excellent performance of "six around one" bundle transmission. BCLS-31 cable exceeds CAT 6A specifications to provide additional performance and bandwidth beyond the basic standard

FEATURES

High-Performance Single Cable Transmission

Zigzag Jacket Design - Provides excellent performance of six around one bundle transmission

Round & Smooth Jacket without Twisted Stripe

High-Quality Safety Properties

Sweep Frequency up to 650MHz

Length - Available in wooden drums of 500m (1640ft)



TECHNICAL SPECIFICATIONS

CONSTRUCTION	Conductor: 4 pairs of 23AWG solid bare copper Insulation: Polyolefin (PO); blue & white, orange & white, green & white, brown & white Twist: Left-hand Assembly: Left hand direction Rip Cord: Polyester multi-yarn Jacket: Low smoke zero halogen (LSZH), yellow (Pantone 116C)
Filler:	Polyolefin (PO)
DIAMETERS	Jacket: Diameter: $8.3 \pm 0.2\text{mm}$; thickness: $1.10 \pm 0.01\text{mm}$ Insulation: Blue & white: $1.17 \pm 0.02\text{mm}$ Orange & white: $1.12 \pm 0.02\text{mm}$ Green & white: $1.15 \pm 0.02\text{mm}$ Brown & white: $1.10 \pm 0.02\text{mm}$
ELECTRICAL	Temperature & Voltage Rating: $60^\circ\text{C} @ 300\text{V}$ Spark Test: 2.5kV DC AC Leakage Current: $\leq 10\text{mA}$ (1.5kV AC) through overall jacket Conductor DC Resistance: $\leq 9.38\Omega / 100\text{m}$ Resistance Unbalance: $\leq 5\%$ Dielectric Strength: 1.5kV AC for 2sec Insulation Resistance: $\geq 5000\text{M}\Omega / \text{m}$ Mutual Capacitance: $\leq 5.6\text{nF} / 100\text{m}$ Capacitance Unbalance: $\leq 330\text{pF} / 100\text{m}$ pair-to-ground Characteristic Impedance: $100 \pm 15\Omega @ 1\text{~}100\text{MHz}$ Coupling Attenuation: $\leq 55\text{dB} @ 30\text{MHz}$, $\leq 41\text{dB} @ 500\text{MHz}$
USAGE AND ENVIRONMENTAL	Cable Cold Bend: -20°C for 4hr Insulation Tensile Strength: 2400 PSI min. (1.69kg/m,2) NVP 67% 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: $\leq 110\text{N}$
REGULATORY PERFORMANCE	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 50288-6-1:2013: Multi-element metallic cables used in analogue and digital communication and control – Part 6-1: Sectional specification for unscreened cables characterized up to 250MHz – Horizontal and building backbone cables

REGULATORY
SAFETY

EN 50173-1:2011: Information technology – Generic cabling systems – Part 1: General requirements

IEC 60332-1-2: Tests on electric and optical fiber cables under fire conditions – Part 1-2: Test for vertical flame propagation for a single insulated wire or cable – Procedure for 1kW 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



CONFIGURATIONS

BCLS-31YL-5

CAT 6A U/UTP LSZH Cable - Yellow
