

SYSTIMAX®

SOLUTIONS

SYSTIMAX® 81A Series GigaSPEED® XL Cable

Designed by SYSTIMAX® Labs to provide reliable high-performance connectivity

The SYSTIMAX GigaSPEED® XL 81A series cable transmits reliable voice, data and video, with guaranteed margin of 10 dB NEXT and PSNEXT, and is designed with a fluted center member.

The GigaSPEED XL 81A series family of unshielded twisted pair cables includes the 1081A non-plenum, 2081A plenum, and 3081A low smoke zero-halogen (LSZH) cables. Combine this with the new GigaSPEED XL apparatus, for the ultimate in cabling system performance.

Features and Benefits

- Guaranteed 10dB NEXT & PSNEXT margin to the Category 6 standard.
- Electrical performance guaranteed to meet or exceed TIA/EIA 568-B.2-1 Category 6 and ISO/IEC Category 6/Class E specifications.
- Available in easy to use 1000- and 3000-foot open reel packaging. Custom lengths also orderable.
- 4-pair construction with fluted center member provides the extra margin of performance required for high-bandwidth applications.
- All 4 pairs of the plenum rated 2081A version are FEP insulated for superior balanced performance and safety.
- Performance characterized to 550 MHz to support high bandwidth video applications.
- UL® listed (CM, CMP & CMR) and CSA(type FT4) certified. ACA approved.
- Can support network line speeds in excess of 1 gigabit per second.
- Certified component of an integrated GigaSPEED XL Solution.
- Qualifies for a 20-year product and applications assurance warranty when included as part of a certified SYSTIMAX GigaSPEED XL channel.

SYSTIMAX® Structured Connectivity Solutions

Performance Specifications

	81A Cable	XL7 Solution	XL8 Solution
	Typical Worst Pair Margin*	GigaSPEED Channel (4 Connectors)	
		Guaranteed Margin**	Guaranteed Margin**
Insertion Loss	5.0%	5.0%	7.5%
NEXT	12.0 dB	6.0 dB	7.0 dB
PSNEXT	12.0 dB	7.5 dB	8.5 dB
ELFEXT	10.0 dB	6.0 dB	8.0 dB
PSELFEXT	10.0 dB	8.0 dB	10.0 dB
Return Loss	4.0 dB	4.0 dB	4.0 dB
Frequency Range	1-550 MHz	1-250 MHz	1-250 MHz

* Typical worst pair swept margin.

**Guaranteed margin is valid at any frequency from 1-250 MHz for a SYSTIMAX certified channel comprising GigaSPEED XL apparatus and 71E series cable (GigaSPEED XL7 Solution) or 81A series cable (GigaSPEED XL8 Solution). Values represent margin over the draft Category 6/Class E channel specifications.

Physical Specifications

Dimensions	(Width x Height x Depth)
Weight:	1081A: 28.5lb (12.93kg) 2081A: 32.7lb (14.38kg) 3081A: 30.2 lb (13.7 kg)
Jacket Thickness:	1081A: 0.020 in (0.50 mm) 2081A: 0.017 in (0.43 mm) 3081A: 0.028 in (0.71 mm)
Outside Diameter:	1081A: 0.25 in (6.4 mm) 2081: 0.23 in (6.1 mm), 3081: 0.27 in (6.4 mm)
Conductor Diameter:	0.0225 in (0.57 mm)
Insulation Type:	1081: High-density Polyethylene 2081: Fluorinated-Ethylene-Propylene 3081: Non-halogen high-density Polyethylene
Jacket Material:	1081: PVC 2081: Low Smoke PVC 3081: Low smoke zero halogen compound
Maximum Pulling Tension:	25 lbs.
Nom. Velocity of Propagation NVP:	1081A: 0.69 2081A: 0.72 3081A: 0.69
Max DC Resistance:	9.83 Ohms/100m
Mutual Capacitance @ 1kHz:	1081A: 4.95 nF/100m 2081A: 4.78nF/100m 3081A: 4.95 nF/100m
Operating Temperature:	-20 to 60° C
UL Type:	1081A: CMR & CMG 2081A: CMP
LSZH (3071E) Compliant with the Following Tests:	IEC 754 Part 2, IEC 1034 Part 2, IEC 332 Part 1, NES 713.

Ordering Information

Non-Plenum	Color	Quantity	Material ID	Plenum	Color	Quantity	Material ID
1081 004A	SL Slate	R1000	108 680 802	2081 004A	SL Slate	R1000	108 681 214
1081 004A	SL Slate	R3000	108 744 921	2081 004A	WH White	R1000	108 681 172
1081 004A	WH White	R1000	108 681 115	2081 004A	WH White	CUSTL	108 900 770
1081 004A	WH White	R3000	108 744 939	2081 004A	BL Blue	R1000	108 681 180
1081 004A	BL Blue	R1000	108 680 869	2081 004A	BL Blue	CUSTL	108 901 554
1081 004A	BL Blue	R3000	108 744 947	2081 004A	YL Yellow	R1000	108 681 198
1081 004A	LB Lt Blue	R1000	108 680 810	2081 004A	RD Red	R1000	108 681 248
1081 004A	YL Yellow	R1000	108 680 885	2081 004A	GR Green	R1000	108 681 206
1081 004A	RD Red	R1000	108 680 893	2081 004A	BK Black	R1000	108 681 230
1081 004A	GR Green	R1000	108 681 131	2081 004A	LL Lilac	R1000	108 681 222
1081 004A	BK Black	R1000	108 744 954	2081 004A	OR Orange	R1000	108 681 164
1081 004A	LL Lilac	R1000	108 681 149	2081 004A	OR Orange	R1000	108 681 156
1081 009A	OR Orange	CUSTL	700 189 061	2081 004A	YL Yellow	CUSTL	108 901 562
				2081 004A	GR Green	CUSTL	108 901 570
				2081 004A	BK Black	CUSTL	108 901 588
				2081 004A	RD Red	CUSTL	700 179 112

Non-Halogen	Color	Quantity	Material ID
3081 004A	WH White	R1000	108 687 658
3081 004A	WH White	R3000	108 687 682
3081 004A	BL Blue	R1000	108 687 674
3081 004A	BL Blue	R3000	108 687 690

Note: Non-Halogen available only in Europe. W=WE TOTE Box, R=Reel, CUSTL=Custom Length, T=Reel in a box, *=Austel Certified (Available only in Australia and New Zealand), **=length +10% -0%,

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