Member of LEONI Group

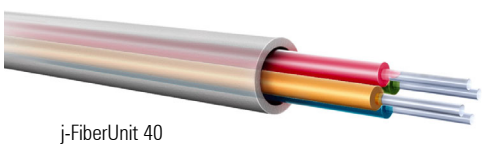
j-FiberUnit 40

enabling 40 Gb/s Ethernet OM3 parallel transmission

The new j-fiber solution to enable parallel 40 Gb/s Ethernet transmission for highly flexible cable installations

Advanced cabling in datacenters demands for higher data rate transmission already today while reducing network complexitiy and costs. j-FiberUnit 40 is j-fiber's new solution for 40 Gb/s OM3 parallel high-bandwidth transmission.
j-fiber FiberUnit 40 uses 4 j-fiber OptiGrade OM3 multimode fibers with 10Gb/s data-rate transmission capacity each.
Unlike current fiber ribbon constructions, j-FiberUnit 40 has no preferential bend orientation. With a minimum skew value far below the required ≤0.75ns (run time differences between the signal of the fibers) j-FiberUnit 40 ensures reliable 40 Gb/s parallel transmission. With a link length up to 150 m[1] j-FiberUnit 40 performs even beyond approved IEEE objectives and thereby allows to make IT cabling installations in advanced datacenters future-safe, well-structured and cost-efficient.

[1] Final fiber-unit length in the IEEE 802.3ba Task Force is still in discussion



j-FiberUnit 40

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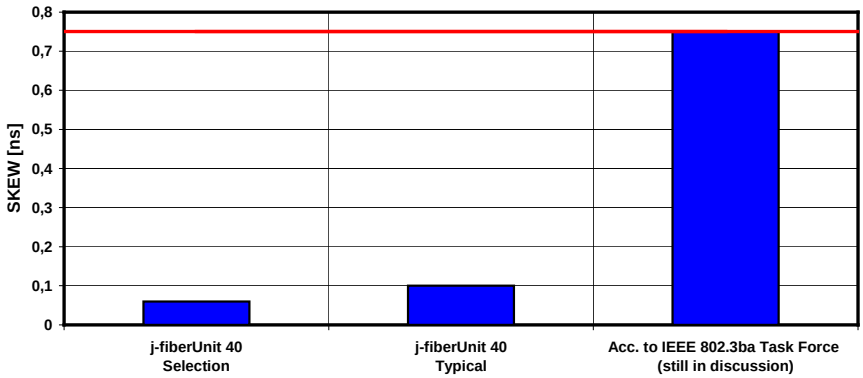
Typical Skew Advantage of j-FiberUnit 40
Skew/100 m Link Length



Application

j-FiberUnits have been designed as a parallel transmission solution for next generation datacenter or office IT-cabling with demand for high-bandwidth of up to 40 Gb/s transmission rates. j-FiberUnits support link-lengths of 150 m to allow for structured, cost-efficient cabling and future-safe planning perspectives.

Flexible Use. Best Skew. High Link-Lengths.

- No preferential bend orientation
- Enables 40 Gb/s transmission using 4 OM3 OptiGrade fibers
- Up to 150 m link-length
- Excellent skew values of far below ≤0.75 ns
- Easy removable buffer material
- Different color coded fiber sets for full 40Gb/s duplex operation

For further information about j-fiber products and services, please contact us:

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Specification FiberUnit 40

j-FiberUnit 40	Spec. Values	Unit
Number of Fibers in Unit	4	
Max. Attenuation in Unit at 850nm	≤2.6	dB/km
Max. Attenuation in Unit at 1300nm	≤0.8	dB/km
Skew	≤0.75	ns
Transmission Link length	≤150	m
Outside Diameter	850 ±50	µm
Color Set Fibers	2 color sets for Duplex Deployment	
Buffer Material	UV cured Acrylate	
Color Buffer Material	Clear	
Filling Compound	Easy removable gel	
Operating Temperature Range	-20 to +80	°C

Specification Fiber

OptiGrade 50/125/250 OM3 Fiber		Spec. Values	Unit
Fiber Type		OptiGrade 50/125/250 OM3[1]	
Core Diameter		50 ± 2.5	µm
Cladding Diameter		125 ± 1.0	µm
Coating Diameter		245 ± 10.0	µm
Numerical Aperture		0.200 ± 0.015	
Effective Group Index of Refraction	850nm	1.483	
	1300nm	1.478	

[1]See j-fiber OptiGrade Multimode Fiber Series datasheet for details

Colors according to IEC 60304[1]

	Color	
j-FiberUnit 40 A	Red	
	Green	
	Blue	
	Yellow	
j-FiberUnit 40 B	White	
	Grey	
	Brown	
	Purple	

[1] Other colors and color combinations available upon request

Ordering Information

To order our j-FiberUnit 40 please call, fax or email us and specify the following parameters when ordering:

Desired Attenuation:	at 850 nm/1300 nm
Unit Quantity:	m/km
Color Set:	Specific colors
Other:	desired ship date, reel length, special requests

All fibers and preforms are subject to j-fiber's ongoing process and quality improvement programs ensuring excellent performance and high reliability. We reserve the right to make changes to the above specification without notice.

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Officially registered facility according to EWG No. 761/2001