



Member of LEONI Group

j-FiberUnit 40

enabling 40 Gb/s Ethernet OM3 parallel transmission

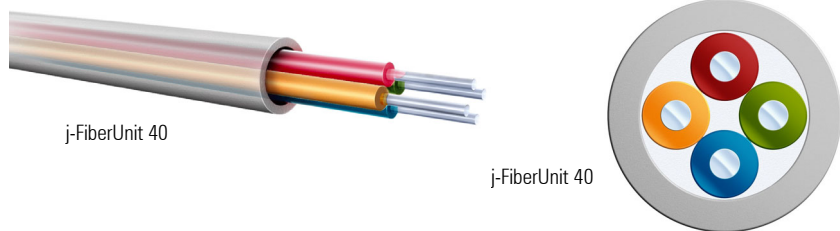
The new j-fiber solution to enable parallel 40 Gb/s Ethernet transmission for highly flexible cable installations

Advanced cabling in datacenters demands for higher data rate transmission already today while reducing network complexity and costs. j-FiberUnit 40 is j-fiber's new solution for 40 Gb/s OM3 parallel high-bandwidth transmission.

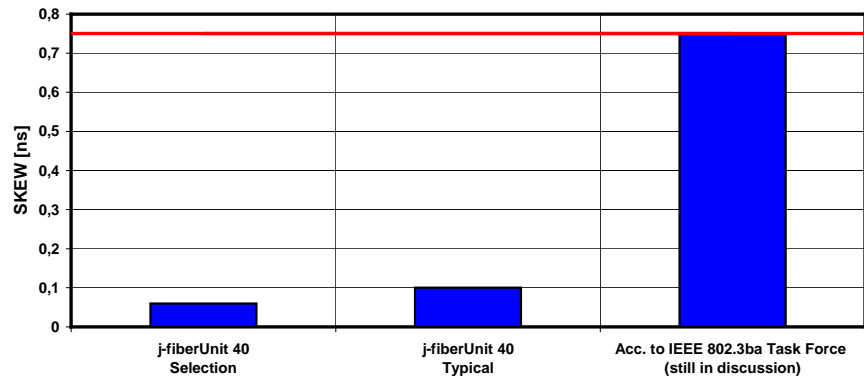
j-fiber FiberUnit 40 uses 4 j-fiber OptiGrade OM3 multimode fibers with 10Gb/s data-rate transmission capacity each.

Unlike current fiber ribbon constructions, j-FiberUnit has no preferential bend orientation. With a minimum skew value far below the required $\leq 0.75\text{ns}$ (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 m¹ 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



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



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

j-fiber GmbH

Im Semmicht 1
D-07751 Jena, Germany
Tel.: +49-3641-352 100
Fax: +49-3641-352 101
Email: info@j-fiber.com
Internet: www.j-fiber.com

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 limitation
- Enables 40 Gb/s transmission using 4 OM3 OptiGrade fibers
- Up to 150 m link-length
- Excellent skew values of far below $\leq 0.75\text{ ns}$
- Easy removable buffer material
- Different color coded fiber sets for full 40Gb/s duplex operation

Coming soon:

Watch out for j-FiberUnit 100 using 10 fibers to allow for 100Gb/s data rate transmission!

Specification FiberUnit 40

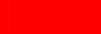







j-FiberUnit 40	Spec. Values	Unit
Number of Fibers in Unit	4	
Max. Attenuation in Unit at 850nm	≤2.6	dB/km
Max. Attenuation in Unit at 1300nm	≤0.8	dB/km
Skew	≤0.75	ns
Transmission Link length	≤150	m
Outside Diameter	850 ±50	μm
Color Set Fibers	2 color sets for Duplex Deployment	
Buffer Material	UV cured Acrylate	
Color Buffer Material	Clear	
Filling Compound	Easy removable gel	
Operating Temperature Range	-40 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 1300nm	1.483 1.478

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

Colors according to IEC 60304¹

	Color	
j-FiberUnit A	Red	
	Green	
	Blue	
	Yellow	
j-FiberUnit 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.

DB-FU-NG-001-02-1109 Issued November 2009

Supersedes DB-FU-NG-001-01-1109

Copyright 2009 © j-fiber GmbH with regard to DIN ISO 16016

Officially registered facility according to EWG No. 761/2001

