

Shaping the future with "Tsunagu" Technology.

# FUJIKURA NEWS

2018 No.445

# 8



## Launch of Sales of New Single Fiber Fusion Splicer 41S

Fujikura Ltd. (President and CEO: Masahiko Ito) has announced the launch of a new single-fiber active cladding alignment fusion splicer in September 2018.

By using Bluetooth technology, the 41S wirelessly connects to the CT50 fiber cleaver and enables a range of pioneering features that will improve the overall installation time, cost and efficiency for operators.

Frequently when cleaved fibers are set into a fusion splicer it becomes clear that the bare fiber end is damaged due to friction caused by a worn cleaver blade. However, this issue is efficiently minimized with the 41S fusion splicer. It uses wireless

communication to monitor and rotate the fiber cleaver blade into a position where it will produce a good cleave angles.

The 41S also has the unique capability to estimate splice loss with greater accuracy, using a New Core Loss Estimation Function, than previous Fujikura cladding alignment type fusion splicers.

The new fusion splicer will be exhibited at CIOE2018 (China International Optoelectronic Exposition) in China on September 5 and ECOC (European Conference on Optical Communication) to be held in Italy on September 23.

### Examples of Product Specifications

Model Name	41S
Typical slice loss	0.03 dB (For single-mode fiber fusion)
Fusion splice time	6 seconds (For single-mode fiber fusion)
Shrinkable-sleeve heating time	25 seconds (For Fujikura sleeve FP-03 shrinkage)
Wireless communication standard	Bluetooth® 4.1 LE

### New Single-Fiber Fusion Splicer



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Precision Equipment Division [info-splicer@jp.fujikura.com](mailto:info-splicer@jp.fujikura.com)

Website dedicated to splicers <https://www.fusionsplicer.fujikura.com/jp>

## Data Center Solutions

Information communications technology (ICT) has been increasingly advancing, and Revolution for next-generation information technology is about to start with hot technologies such as 5G, IoT and automated driving, which connect between people and devices or between devices in an instant. Data traffic is increasing steadily worldwide, resulting in increased demand for the construction of data centers to support the transmission of large amount of data in each place.

Fujikura offers leading-edge technologies and a variety of product lineups, which have been developed over 130 years since our founding, and solves challenges with our clients, and flexibly reacts system requirements to provide optimal solutions. Fujikura's "Tsunagu (connecting) technology" contributes to the construction of advanced data centers and the development of digital society where people can connect to anyone anytime anywhere.



Senior Vice President & Member of the Board  
Power & Telecommunications Company  
**Hideyuki Hosoya**

### High-speed large-capacity wiring solution

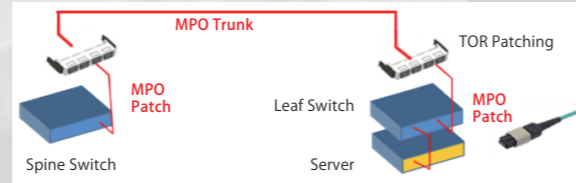
#### MPO cabling system

Multi-fiber batch connector also used for high-speed large-capacity parallel transmission  
Low loss despite of multi-core connector,



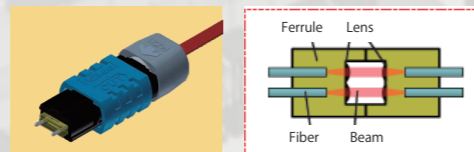
● MPO connector ● 24 MPO connector ● MPO cable with connector

● Example of parallel transmission system configuration



#### Lens MPO connector

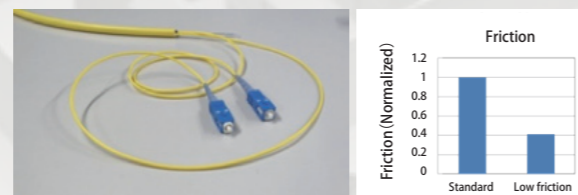
Reduction of effects of dirt attached to connector end face



### Solution for improvement in congestion and reduction in construction period

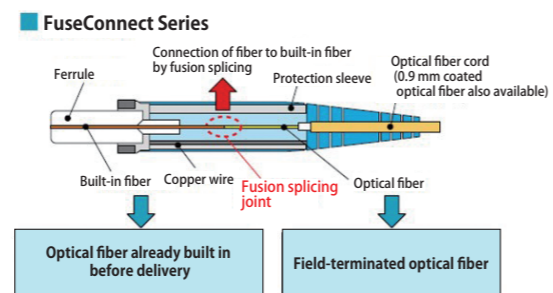
#### Low-friction cord and cable

Ease of cable removal by lowering friction  
Prevention of line trouble due to increase in loss during handling by using low-bending-loss optical fiber



#### Fusion-spliced field-terminated connector

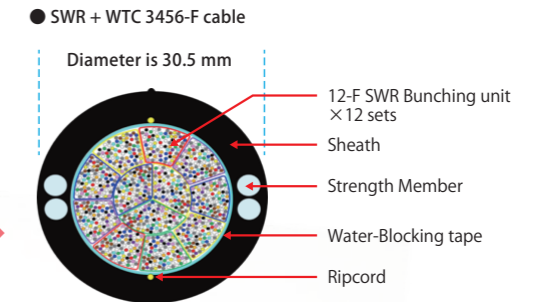
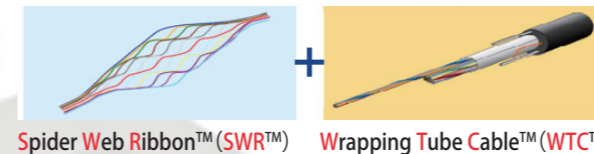
Improvement in line congestion by setting optimal extra length  
No need of checking connection distance in advance  
Quick installation of network  
Enable to change connector type on site



### Ultra-high Fiber Count Cable Solution

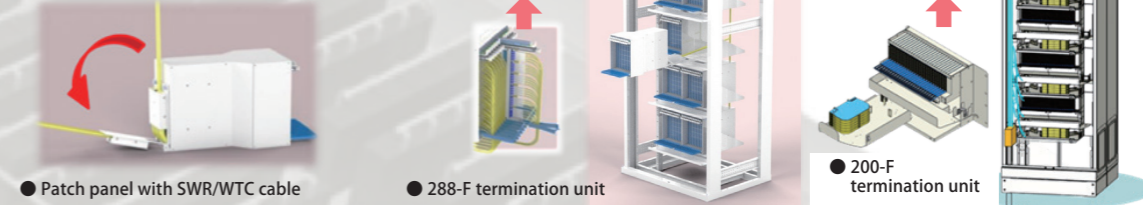
#### Small diameter and high-density optical fiber cable

Drastic reductions in diameter and weight using latest optical technology of SWR and WTC structures



#### High-Density Optical Cabinet

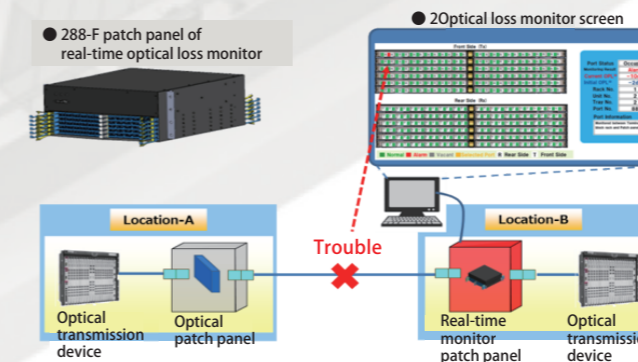
Development of high-density termination rack with workability and expandability



### Operation and maintenance solution

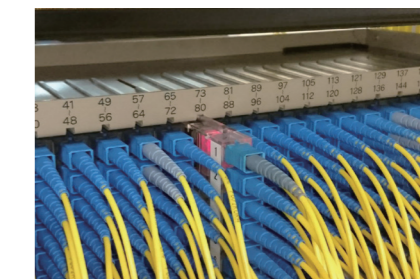
#### Real-time optical power monitoring system

Real-time monitoring of transmitted light state  
Separation of troubled section possible on alarm condition



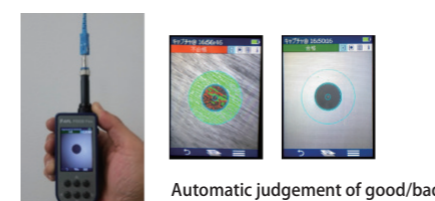
#### Transparent adapter patch panel

Visual check by visible light during connection/disconnection of connector



#### End face observation device

Visual check for dirt on end face



#### One-Click® Cleaner

Easy cleaning of end face



#### Fiber identifier

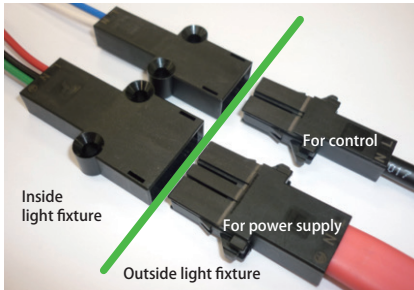
Optical line check with optical identifier during connection/disconnection of connector



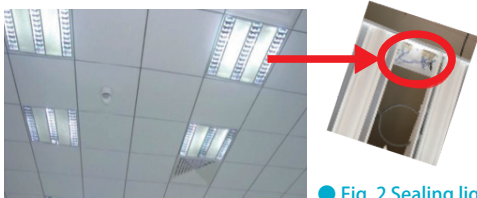




## Harness with Low-profile Connector for Indoor Illumination



● Fig. 1



● Fig. 2 Sealing light fixture and joint

This product was jointly developed by Fujikura and Nishi Nippon Electric Wire and Cable Co., Ltd.

### Features

#### 1. Reduction in connector height

The connector height was reduced by about 40% compared to that of another company's product. This will save attic space, which enables the builders of skyscrapers to add extra floors.

#### 2. Saving of time and work

Because the product is delivered in the form of harness, the remaining field work is to connect the connector to a light fixture. This will reduce work time compared to that spent to make connections in the field. Even unlicensed workers can install the product.

✉ Connector Development Division [ddk.contact@jp.fujikura.com](mailto:ddk.contact@jp.fujikura.com)

✉ Wiring System Division, Nishi Nippon Electric Wire and Cable Co., Ltd <http://www.nnd.co.jp/>



## CEATEC JAPAN 2018

Fujikura will be exhibiting at CPS/IoT Exhibition of CEATEC JAPAN 2018 to be held at Makuhari Messe from October 16 to 19. We set our catch phrase as "Fujikura's Tsunagu (connecting) technology accelerates the realization of a super smart society (society 5.0). Our products are divided into the four sections below and on display so that any visitors can easily understand how these products contribute to realizing the super smart society.

The four sections include "reassuring, safe healthcare solutions using IoT," "smart factory solutions using AI," "information communications solutions to support CPS (cyber physical system) and "next-generation mobility and energy solutions." The sections of IoT and AI are the centerpieces of our exhibition. The IoT section shows energy harvesting sensor systems and shoes with GPS and IoT monitoring systems, and stretchable membranes. The AI section demonstrates AI application examples.

We look forward to meeting you at our booth.



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