

SHAPING THE FUTURE WITH "TSUNAGU" TECHNOLOGY.

# FUJIKURA NEWS

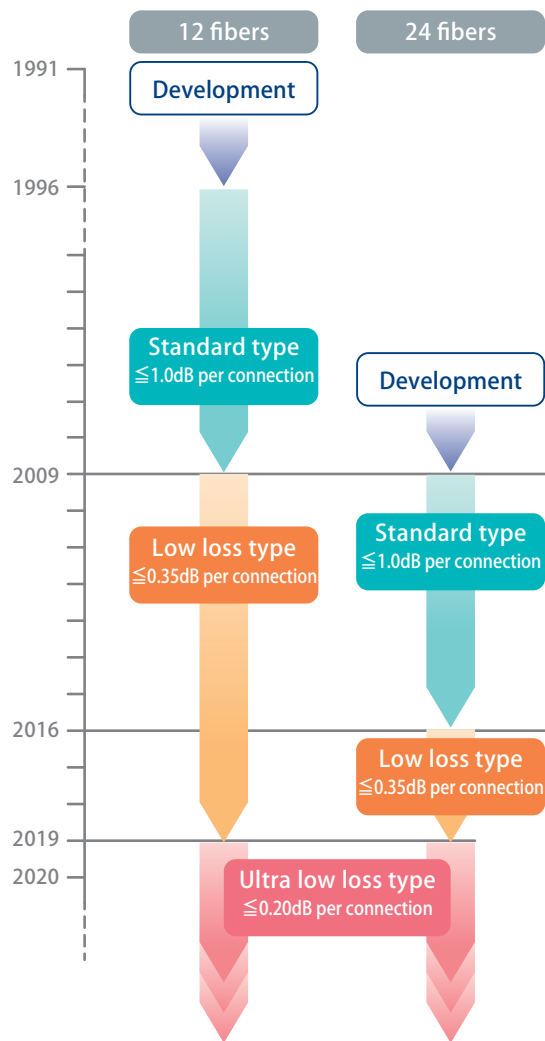


## Ultra-low-loss MPO Connector

MPO connectors for single-mode optical fibers establish interconnection between devices, inside a device, or between transceivers. As the connectors that can connect high-density high-count fibers at once, they are used at data centers and other places worldwide and have been standardized by Japanese Industrial Standards (JIS) and International Electrotechnical Commission (IEC).

Since it was difficult for MPO connectors for single-mode optical fibers to be connected with low loss (0.2 dB or less), the market has expected lower-loss connectors to become available. Fujikura has developed and released an ultra-low-loss MPO connector (all fibers 0.2 dB or less) that can connect a 12-fiber/24-fiber cable at one time with the same levels of optical characteristics as those of single fiber optical connectors.

This ultra-low loss MPO connector has enabled connection with low loss in addition to high-density fiber accommodation and improvements in workability by one-time multi-fiber connection. Against the backdrop of increasing traffic worldwide, this product is expected to be used in large-volume transmission devices.



# Exhibition Cable Tech Show 2019

**Dates** June 19 (Wed) - 20 (Thu) 2019  
 9:30 - 18:00 (last day 9:30-17:00)

**Venue** Fujikura booth No. B-21,  
 Tokyo International Forum

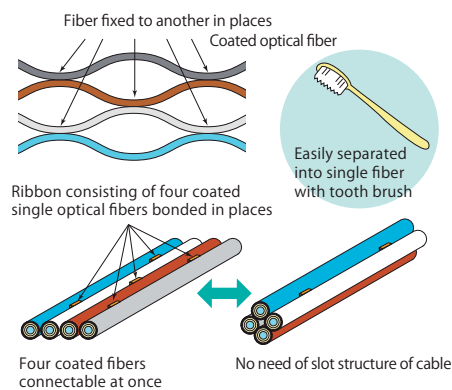
Fujikura will be exhibiting at Cable Tech Show 2019. Our booth, with the theme of proposing next-generation optical network solutions, will introduce mainly a slot-less optical cable, WTC® (Wrapping tube Cable), which has achieved a much smaller diameter and lighter weight than conventional

optical fiber cables.

We are also pleased to present our full cable lineup, including armored cables, which was commercialized this spring, freestanding cables and non-metallic and flame-resistant cables. We look forward with pleasure to your visit.

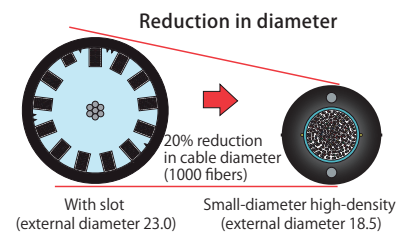
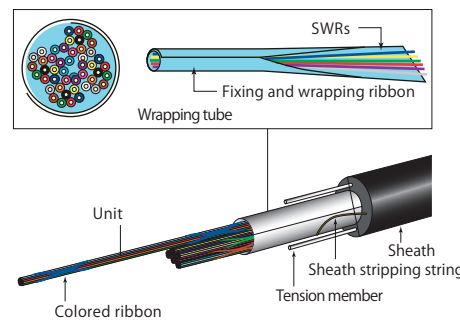
## Spider Web Ribbon® (SWR®)

- Multiple optical fibers arranged in row and bonded in places
- No slot structure needed due to readily formable ribbon
- Return to parallel form at connection to enable connection at once



## Wrapping Tube Cable® (WTC®)

- With structure where SWRs fixed and wrapped by ribbon
- Ensuring of fiber exposure by stripping sheath



ケーブルコンベンション関連イベント  
**ケーブル技術ショー**  
**Cable Tech Show 2019**  
<https://www.catv-f.com/>

Optical Cable Systems Division [telcon@jp.fujikura.com](mailto:telcon@jp.fujikura.com)

# Exhibition 19th Fiber Optics Expo (FOE 2019)

**Dates** July 17 (Wed) - 19 (Fri) 2019  
 10:00 - 18:00 (last day 10:00-17:00)

**Venue** Fujikura booth 10-23,  
 Aomi Hall B, Tokyo Big Sight

Fujikura will be exhibiting at 19th Fiber Optic Expo 2019 (FOE2019). As last year, Fujikura Ltd. and Fujikura Automotive Asia Ltd will jointly run the booth. Our exhibits for this year include products related to datacenters, fiber-optic installation solutions, industrial optical cables and fiber-optic fusion splicers. Each display area is equipped with an LCD screen showing moving images and animations to help visitors understand the products. In our demonstration area, the world's-first cooperative function through radio communication between a fusion splicer and its relevant tool is going to be introduced.

We sincerely look forward to seeing you at our booth.

Fusion splicers and related products  
 Fusion splicer and its relevant tools with  
 radio communication function



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

Website dedicated for fusion splicer <https://www.fusionsplicer.fujikura.com/jp>

# Development of New Partial Discharge Measuring Device

Fujikura Dia Cable Ltd. has developed a partial discharge measuring device A115 using a tuning circuit and started selling the product this fiscal year.

Minute imperfections such as opening in the insulator of an electric device cause the concentration of an electric field and the occurrence of a partial discharge, which deteriorates the insulator. Therefore, in these years, measuring partial discharge draws attention as one of the effective nondestructive test methods for product quality assurance, maintenance and management of aged products, and research and development on insulating materials.

The tuning circuit, especially, has high detection sensitivity and suffers less noise compared to other systems and is suitable to

measure subtle partial discharge signals.

The circuit is used mainly to measure lumped parameter test pieces including electronic components and capacitors and is most suitable for measuring photo couplers, power modules, solar cell back sheets. For example, a photo coupler is required to be measured by a tuning system according to the international standard, IEC 60747. Testing that conforms to IEC 60747 and other standards can be performed readily since the measurement system using the device allows a test pattern to be set to any value with a PC.

Moreover, a pulse counter, D947, is available as an option, which is capable of measuring the occurrence frequency of partial discharges.

## External appearance A115



## Specifications

Model	A115	
Product name	Partial discharge measuring device	
Type	Tuning method (narrow band)	
Main amplifier	Amplified band	300 kHz ≤ f₀ ≤ 500 kHz
	Band width	Δf ≤ 15 kHz
	Amplification	70 dB ± 26 dB
	Attenuator	1/1-1/100 Continuously variable
Input charging current	AC 0.1A for one minute	
Discharged electric charge indicator	0-3 pC, 0-10 pC, 2 ranges	
Applied voltage indicator	10 kV F.S. 2.5 class	
Phase monitor	Electric charge output	2 V Peak
	Voltage phase output	AC0-1 Vrms
External control	Main amplifier ATT, phase monitor ATT	
Power supply	AC100 V, 50/60 Hz, 10 VA	
Dimensions/weight	430 W × 150 H × 250 D mm About 6.8 kg	

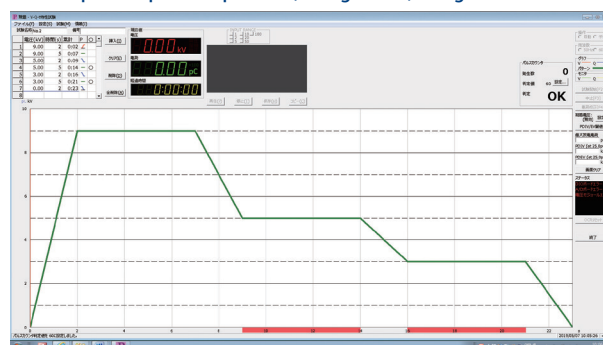
## External appearance D947



## Specifications

Model	D947
Product name	Pulse counter
Count	0-99,999
Power supply	AC100 V, 50/60 Hz, 5.5 VA
Dimensions/weight	480 W × 50 H × 150 D mm About 2 kg

## Example setup of test pattern (voltage-time) using PC software



# Exhibition 5G/IoT Network Expo (Communications & Broadcasting Week 2019)

**Dates** July 17 (Wed) - 19 (Fri) 2019  
10:00 - 18:00 (last day 10:00-17:00)

**Venue** Fujikura Dia Cable booth No.9-9,  
Aomi Hall A, Tokyo Big Sight

Fujikura Dia Cable, Ltd. is being exhibiting at 5G/IoT Network Expo to be held at Tokyo Big Sights. The leaky coaxial cable (LCX\*), ZLCX1.5D, to be presented there is a cable-type antenna with a small external diameter of about 3 mm. This cable offers advantages of space saving, ease of bending, and light weight. This enables wiring in limited space such as in display shelves and real-time product management through communications between the RFID tag of a product and the device. Fujikura's motto includes "to create exceptional value for our customers and contribute to building social infrastructure." With the motto, we will provide solutions to problems that society has by combining the small-diameter LCX plus RFID tags with IoT to reduce

●RFID LCX Cable



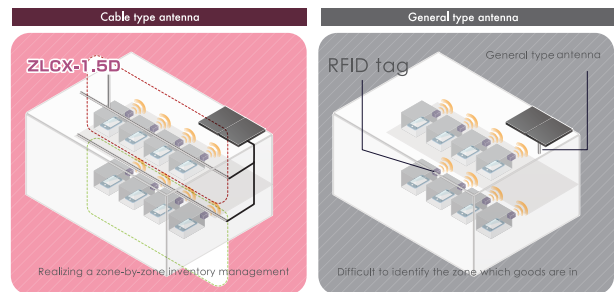
Small external diameter of 3 mm

labor and increase efficiency.  
We are so happy to see you at our booth.

\*LCX: leaky coaxial cable

- Features**
- ◎ Establishment of narrow communication area along cable
  - ◎ No obstruction with a small external diameter of 3 mm
  - ◎ Excellent handling (lightweight, easy to bend)

**Application** ◎ Antenna for 920MHz RFID systems



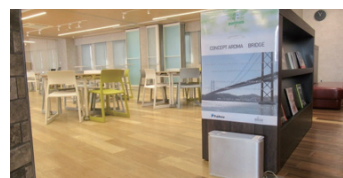
Fujikura Dia Cable Ltd.

<https://www.fujikura-dia.co.jp/contact/>

# Information To Accelerate Open Innovation by Aroma Testing Starts at Fujikura Innovation Hub, BRIDGE.

Fujikura and CODE Meee, which provides the most suitable aroma for individuals and companies, have been jointly coordinating space using aroma. We also have been running verification testing of giving aroma to Fujikura employees' business cards at the open innovation facility called BRIDGE to promote innovation activities. BRIDGE has been aimed at creating value by various people gathering there together since its opening in July last year. When looking for ways to strengthen ties among people with different backgrounds, we met CODE Meee, a startup specializing in aroma, and have focused on the possibility of aroma. In this verification testing, Fujikura provides the place for coming up

with innovative ideas while CODE Meee develops aromas and verifies methods to effectively present the aromas. After verifying positive effects of aromas on innovative activities, we will consider ways of introducing aromas seriously.



● Space creation using aroma at BRIDGE



● Aroma given to business card

Inquiries about BRIDGE on Web

[www.fujikura/contact/02/index.php](http://www.fujikura/contact/02/index.php)



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