

SHAPING THE FUTURE WITH "TSUNAGU" TECHNOLOGY.

FUJIKURA NEWS



Expanded Portfolio of Optical Cable with 200 μ m Fibers

Fujikura has expanded the product lineup of Wrapping Tube Cable™ (WTC™) made of using 200 μ m optical fibers.

Fujikura already have 3456F WTC and 6912F WTC with 200 μ m fibers and now expanded the product portfolio with the addition of 864F WTC and 1728F WTC.

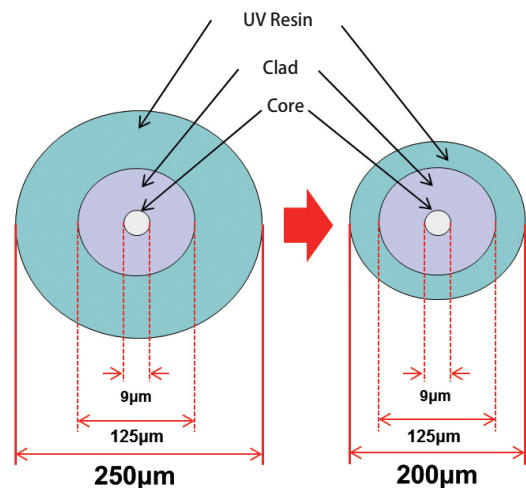
Recently, while video streaming and cloud services have been spreading, in order to support 5G and IoT, there is a demand for further increase in the capacity of optical fiber networks. In large cities in particular, the shortage of conduit lines has become apparently visible. As a result, the demand for installation of high-fiber count optical cables in limited space has been increasing rapidly.

To meet this demand, Fujikura has developed cables using 200 μ m fibers in Fujikura's proprietary 12F Spider Web Ribbon™ (SWR™) that have reduced diameters and light-weight than those of the conventional WTC with 250 μ m fibers.

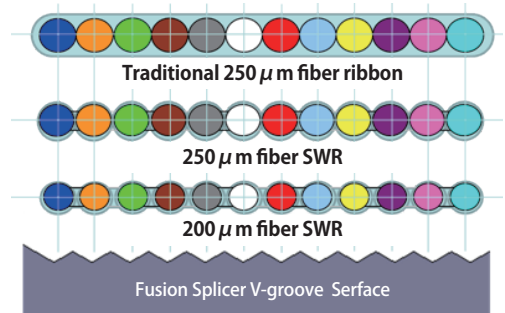
Both SWR with 200 μ m fibers and SWR with 250 μ m fibers have the same pitch. Therefore existing fusion splicers can be used to splice SWR with 200 μ m fibers and 250 μ m traditional Ribbon, or SWR with 250 μ m fibers and SWR with 200 μ m fibers. Thus, network builders do not need to purchase new fusion splicers for splicing 200um fiber ribbons, which contributes to savings in installation costs. Furthermore, the reduced diameter and light-weight of the cable enables longer lengths per drum, which in turn will reduce number of splices and hurdles in transportation.

Fujikura will continue to develop and manufacture products that meet customer needs with a diverse product lineup and fiber counts.

Comparison of 200 μ m Fiber and 250 μ m Fiber



12F SWR Fiber Pitch Structure



200 μ m WTC Product List

Fiber count	864	1,728	3,456	6,912
Outer Diameter (mm)	15.5	20.5	26.5	35.0
Weight (kg/km)	160	290	435	765

FX Exhibition

Fujikura to Exhibit at The 11th Data Center Expo

Dates May 8 (Wed)-10 (Fri), 2019
10:00~18:00 (Last day until 17:00)

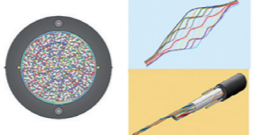
Venue Hall 2 (Fujikura booth: West 8-80), West, Tokyo Big Sight

Fujikura exhibits at The 11th Data Center Expo to be held in May. This expo is held as part of Japan IT Week Spring 2019, a Cloud and IoT tech related exhibition (estimate of 1,600 corporative exhibitors, 90,000 visitors), and shows solutions for power supply, air conditioning, racks, operation and management, and wiring materials in relation to datacenter construction and operation.

We have exhibited at this expo since 2016 for four straight years. Every year, with "to be the most trusted partner in our markets" as our motto, we had many visitors experience our data center solutions at our booth. In the upcoming show, we will present a special video about different wiring solutions (for DCI infrastructure, Cloud, operation and maintenance) and a display of element technology for DC wiring.

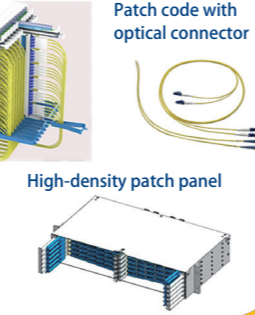
MEET ME ROOM

Inter-DC Connection



Small-diameter high-density optical cable WTC/SWR

MDF Main Distribution Frame

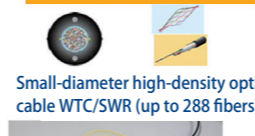


Patch code with optical connector


High-density patch panel

MDF-SERVER ROOM

Backbone in data center

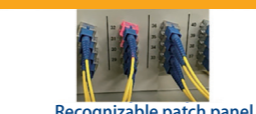


Small-diameter high-density optical cable WTC/SWR (up to 288 fibers)



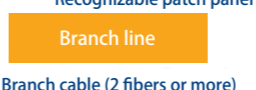
Branch cable (up to 96 fibers)

IDF Intermediate Distribution Frame



Recognizable patch panel


Branch line



Branch cable (2 fibers or more)


SERVER ROOM

Inter-rack Cabling

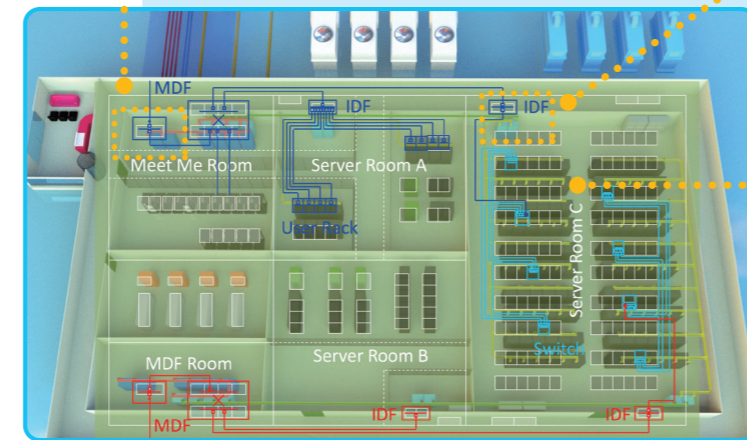


MPO trunk cable (up to 144 fibers)

Patch panel



MPO module and chassis



● Data center layout

Main Exhibits

Data center interconnect (DCI) and optical fiber backbone installation solutions

introduces to ultra-multicore optical fiber installation solutions using small-diameter high-density optical fiber cables (SWR/WTC) to fulfill demands for connection between datacenters and between rooms in a datacenter.

Cloud solutions

introduces to MPO connector installation solutions that enable a high-speed high-capacity transmission and next-generation high-speed high-capacity transmission of 400 Gbps.

Operation and maintenance solutions

introduces to fusion-splicing-type field-assembly connectors that allow design-free, extra-length-free quick construction and the prevention of congestion and how to clean connectors at network construction, improve network quality by fiber end inspection, and prevent disconnecting wrong cables when cables are removed or replaced.

We look forward to seeing you at our booth.

✉ Data Center Business Department telcon@jp.fujikura.com

Automotive Products

Heater and SBR Hybrid Device

Fujikura develops, designs, and sells sensors to detect passengers sitting in vehicle seats. This sensor is part of a seat belt reminder (SBR) system to encourage passengers to wear seat belts and embedded in a vehicle seat. The sensor uses membrane switches with printed conductive circuits and is characterized by thin, soft texture and high design flexibility in shape and sensitivity and has 10 years of field-proven performance.

Besides, for high-end vehicles and vehicles for cold regions are also equipped with seat heaters that are placed beneath the seat surface. Seat heaters not only provide passengers with warm comfort directly but are expected to reduce power consumption when the air

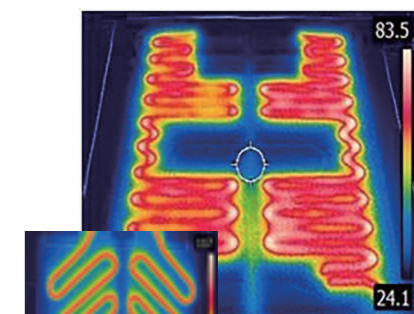
conditioner is turned on. We work on developing a hybrid device of a seat heater and an SBR system by combining the two devices in the same seat, aiming at balancing higher functionality and lower cost. The heating portion of a conventional heater usually consists of a heating wire arranged symmetrically in a seat, and the entire wire warms up by the passage of electric current. In contrast, the new seat heater gives greater freedom of designing the heating area and shape in a seat. The heater also allows on/off control in step with the SBR sensor, which detects the occupancy of a passenger, to enable effective warming and efficient energy savings.



● Seat with heater and SBR



● Heater and SBR hybrid device



● IR image
New product (plane heating)
Existing product (wire heating)

✉ Automotive Products Company automotive@jp.fujikura.com

INFORMATION

Introduction to Bio Garden "Fujikura-Kiba Millennium Woods"

In November 2010, eight years before, in Koto-ward in Tokyo, the Fujikura Group created a bio garden, Fujikura-Kiba Millennium Woods, which connects humans and nature together. This garden has been designed to preserve biodiversity by accommodating trees native to the Kanto region and fish caught in Arakawa River and released in the pond so as to reproduce rich woods of Musashino plateau hundreds years ago. In Fujikura-Kiba Millennium Woods, we hold lectures about biotope as the opportunities to introduce our group's commitment and also offer local elementary schools the use of the garden for their nature education programs and the government for their hosting eco-tours.

In addition, in 2017, the biotope was registered as an excellent greenery under Edo Greenery Regeneration Project devised by Tokyo Metropolitan Government (TMG). This registration system was developed by TMG as part of their commitment to regenerating the environment that is appropriate for the animals, including insects and birds, living in Tokyo by planting native plants in the premises of buildings. Our biotope that focuses on native creatures was recognized and registered in the list.

Fujikura-Kiba Millennium Woods have been closely watched by local residents and now fully grown so that chicks of spotbill ducks and kingfishers leave their nests, which make us feel as if we were not in the urban area.

We look forward to your dropping in the woods.



●Family of spotbill ducks

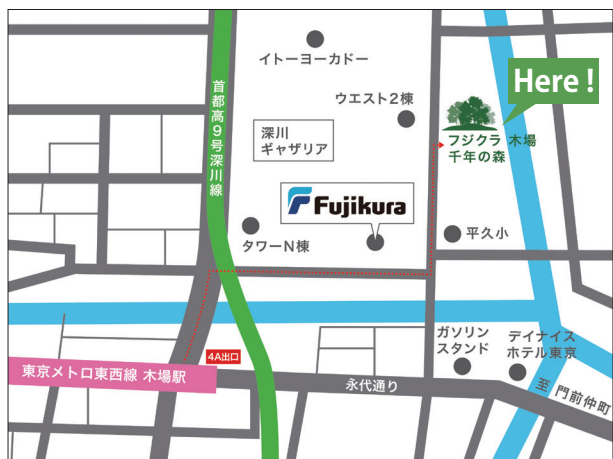


●Kingfisher couple looking for nest to lay eggs

施設案内

Open hours : April to September 7:00~18:00
October to March 7:00~17:00
(Free of charge)

Address : Fukagawa Gateria
(Close to Fujikura Headquarters, 1-5-1 Kiba, Koto-ward, Tokyo)



✉ CSR Promotion Team fjk.csr@jp.fujikura.com



"Tunagu" Technology New Product News No.453
1-5-1, Kiba, Koto-ku, Tokyo, Japan 135-8512
TEL. +81 (0) 3 5606 1112 FAX. +81 (0) 3 5606 1501
Issue : April 2019, No. 453 Editor in Chief : Tomoharu Morimoto
<http://www.fujikura.co.jp>

Market Research & Planning Department	+81(0)3 5606 1092
Kansai Office	+81(0)6 6364 0373
Chubu Office	+81(0)52 212 1880
Tohoku Office	+81(0)22 266 3344
Kyushu Office	+81(0)92 291 6126