"Tsunagu"Technology New Product News

Fujikura NEWS

12

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Power and Telecom

Release of Advanced Optical Fiber Identifier FID-30R/31R

An optical fiber identifier exerting no effect on transmitted light has become a must to avoid accidental disconnection and improper connection of optical fibers in launching, rerouting, and maintaining optical network. Fiber identification refers to identifying optical fibers that receive specific signals sent from a base station without disruption.

In recent years, bend-resistant and leak-proof optical fibers are commonly used. This requires optical identifiers with enhanced detection sensitivity. In addition, there has been a growing demand for functions to detect the presence or absence of an ONU (optical network unit) and prevent accidental disconnection.

In response to these needs, Fujikura has developed and introduced the FID-30R/31R with substantially improved sensitivity and ONU detection function.

Main features

- Significant enhancement in fiber detection sensitivity
  Compared to previous models : 10 times higher (normal mode) / 40 times higher (high-sensitivity mode)
- ONU detection function for different carrier and service conditions
- All-in-one design
  Fiber identification, live-line detection, signal direction indicator, ONU detection, power meter (only equipped in FID-30R)
- New mechanisms and functions
  Lever-lock mechanism
  Color-LCD screen with touch panel
  Constant-pressure maintaining mechanism
  Software update function via internet download

FID-30R

FID-31R

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New Addition to Lineup of Anti-Tree Protector for Insulation Cover

Fujikura is pleased to announce the addition of a new protector for insulated wire covers to the product lineup. We have supplied abrasion-resistant wire protectors and protectors preventing wire covers from damage by trees to electric power utilities and other companies.

The products are Compliant with Requirements specified by the Definitions of Technological Standards concerning Electrical Facilities, Article 79 (closeness between low/high voltage aerial distribution lines and plants).

Once insulated wires or insulated terminal clamp covers for power poles are put in the protectors, they become tolerant of contact with trees moved by constantly blowing wind. The insulated terminal clamp covers include standard and compact products. A compact-type protector was added to the product lineup this time, enabling expansion of uses.

In addition, this product has a structure (inner abrasion-warning layer and outer abrasion-buffer layer), withstand voltage and abrasion-resistance similar to those of an existing model.

Outer layer
(abrasion-buffer layer)

Inner layer
(abrasion-warning layer)

Insulated terminal clamp cover

Requirements specified by the Definitions of Technological Standards concerning Electrical Facilities, Article 79 (for protector)

Structure			A insulated and abrasion-resistant structure comprising an abrasion-warning layer covered with an abrasion-buffer layer
Performance	Withstanding voltage	Dry	Must withstand 15,000 V for one minute while wear-warning layer exposed
		Wet	Must withstand 10,000 V for one minute while wear-warning layer exposed
	abrasion-resistant		Must withstand 500 rotations of abrasive disk without wearing a hole after the abrasion-warning layer has been exposed

Transmission and Distribution System Engineering Division haiden-info@jp.fujikura.com

Development of Roadside Information Transmission System(Information Outlet)

Suzuki Giken Co., Ltd. develops and manufactures a roadside information transmission system (information outlet) in cooperation with Oki Electric Industry Co., Ltd. and Fujikura. Suzuki Giken also supplies the products to West Nippon Expressway Company Ltd. through Oki Electric Industry.

Emergency telephone booths are installed at certain intervals on roadsides or in parking areas of highways so that highway users can call a highway operator in case of a car accident or mechanical trouble. The newly developed roadside information transmission system incorporates a conventional emergency telephone and an information transmission device. The system finds widespread application to, for example, a wireless LAN, CCTV camera, and various types of sensors through optical transmission.

The new system features easy installment at a site by using two vertically separated cases and easy maintenance work including parts replacement thanks to mounting techniques that Suzuki Giken has nurtured over time. The product is expected to be introduced more widely to increase the sophistication of highway maintenance and management. More than 300 units of the product were already delivered. Suzuki Giken, Oki Electric and Fujikura will closely cooperate toward further adoption of the products by each highway operator.

Main features

- Facilitation of installation and maintenance work by use of separated cases
- Easy routing (cables for power supply, transmission, fiber optics) and parts replacement
- Energy saving design to dissipate heat without air-conditioning device inside case

Appearance of product installed on roadside

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Release of Screw-less Terminal Block for Branch Connection of Communication Lines

Fujikura has developed a terminal block free of screws for connecting communication cables, FJTL-10-20P, and put it on the market. This product can be used for branch connection and transit connection of communication lines for distribution automation system mainly at electric power utility companies. The main features are as follows:

Product Specifications

Items	Characteristics
Rated voltage/current	600 V AC/DC, 5 A
Wire size	Conductor Diameter (only solid copper wire) : 0.9 mm to 1.2 mm (outer diameter of jacket : 1.9 mm to 2.6 mm)
Insulation resistance	20 M ohms or more (500 V DC)
Withstand voltage	3,000 V AC/minute
Mounting rail	35 mm DIN rail

Main Characteristics

■ Insulation displacement connection (IDC)
Adoption of IDC (using special connecting tool)
Easy installation without the need of cuttings of jacket

■ Uses for various connection patterns
Maximum of three branches (four-line connection) for 10 pairs (20 conductors) for standard specifications

■ Terminal-block in two contrasting colors
Greater visibility of connection point in two contrasting colors

Screw-less Terminal Block (FJTL-10-20P)

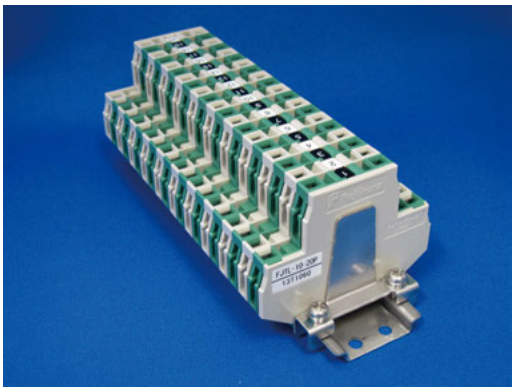
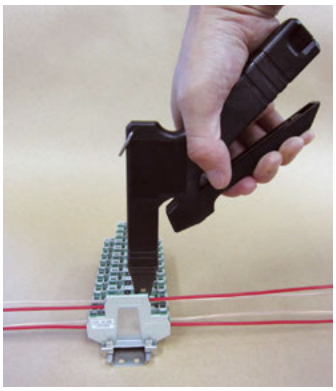


Image of connecting lines



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