

# S185EVROF

Designed for novelty fibers and beyond



Three electrode Ring of Fire™ arc-discharging and STA<sup>2</sup>D™



Dual Mirror System-simultaneous view of both fiber ends



World's first Composite Image Technology - both fiber images overlapped for precise alignment

Best-in-class, compact and portable solution for hollow-core and multi-core fibers

STA<sup>2</sup>D - sequential asymmetric arc-discharge fine tuned for all types of hollow-core fiber and small cladding fibers

Composite Image Technology overlays both end view fiber images into one picture ensuring precise match

Highly accurate rotational alignment (0.1 degree)

Side view mode for traditional fibers

The FITEL S185EVROF combines the cutting-edge features of ROF (Ring of Fire) and EDV (End View) into a single, unprecedented device. The End View System enhances user control, by offering detailed images of fiber cross-sections, making it particularly effective for intricate internal structures such as multi-core and hollow-core fibers.

The proven three-electrode arc discharge system, known for achieving low loss on multi-core fibers, is now reinforced by allowing end-users to view fiber cross-sections before splicing. HCF and MCF are especially sensitive fibers, with excessive heat potentially compromising their structure. The three-electrode discharge ensures uniform heating, while our STA<sup>2</sup>D (Sequential Triangular Asymmetric Arc Discharging) system effectively heats the delicate structure of hollow-core fibers, preserving the internal microstructure.

Integrating these three systems results in precision splicing performance and industry-leading low loss.

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## Specification

Description	S185EVROF	
Applicable fibers*1	SM, MM, DS, NZDS, High-Index, EDF, LDF, PMF, MCF, HCF	
Cladding diameter	Splice: 80 <sup>±2</sup> to 800 μm End view: 125 to 500 μm	
Coating diameter	160 to 1300 μm (In Fiber holder)	160 to 900 μm (Coating clamp splice)
Fiber cleave length	3 mm (Coating clamp splice)	8 to 10 mm (Cladding clamp splice)
Typical splice loss*3	SM (ITU-T G652): 0.014 dB	
Typical extinction ratio*3	PANDA: 40 dB*4 (Angle offset: 0.6 degree)	
Return loss	>60 dB	
Typical splice time*5	15 s (SM by cladding clamp splice)	50 s (PANDA by cladding clamp splice)
Tension strength	1.96 N (+0% to +20%)	
Applicable protection sleeve length	10 to 60 mm	
Typical heat time	35 s (S922: 40 mm sleeve)	
Splice programs	Max. 200	
Heater programs	Max. 100	
Splice data storage	Max. 1000 including 4 images before and after splice	
Fiber image magnification on LCD	104 X, 278 X or 556 X (Side view)	64 X (End view)
Dimension	210 W x 180 D x 165 H mm	
Weight (without Battery)	4.9 kg	
Monitor	4.3" wide color LCD with touch panel	
Data output	USB ver. 2.0 type A: 1 port	USB ver. 2.0 mini B: 1 port
Operating temperature	0 to 40°C	
Storage temperature	-40 to 60°C	
Humidity	0 to 90% (Non-condensing)	
Power source	AC input 100 to 240 V (50/60 Hz)	

\*1 Fibers should be applied to ITU-T standard. In case of other fibers, depending on the type of fiber, the optimization of splice program may be needed or the splice result may not be satisfied.

\*2 Coating clamp splice (Coating Diameter >125 μm)

\*3 These are references. Depending on the environment and condition, the number vary.

\*4 Extinction ratio 40 dB is measured in the condition that the initial extinction ratio is more than 50 dB and there is the splice with 0.6 degree of rotation offset.

\*5 This value is references. Depending on the type of fiber and condition of fiber on splicer, the number can vary.

## Standard package

Item	P/N	Quantity	
		-00	-01
S185EVROF Main body	S185EVROF-X-A-0001	1	1
Hard Carrying Case	HCC-12	-	1
AC Adapter	MDS-150AAS24BD	1	1
AC Cable Code	-	1	1
Z Stage Lock	ZL-01	1 pair	1 pair
Spare Electrode	ELR-07	1 set	1 set
Change Tool for Vertical Electrode	-	1	1
Rear LED Cover for Small Diameter	-	1 pair	1 pair
Electrode Sharpener	D5111	1	1
Cleaning Brush	VGC-01	1	1
User Manual	-	1	1



Standard Package



Hard Carrying Case

## Optional components

Item	P/N	Quantity
160 μm Coating Fiber Holder	S713S-160	1 pair
250 μm Coating Fiber Holder	S713S-250	1 pair
300 μm Coating Fiber Holder	S713S-300	1 pair
400 μm Coating Fiber Holder	S713S-400	1 pair
500 μm Coating Fiber Holder	S713S-500	1 pair
550 μm Coating Fiber Holder	S713S-550	1 pair
650 μm Coating Fiber Holder	S713S-650	1 pair
900 μm Coating Fiber Holder	S713S-900	1 pair
1300 μm Coating Fiber Holder	S713S-1300	1 pair
550 μm Coating BW Fiber Holder	S713B-550	1 pair
1000 μm Coating BW Fiber Holder	S713B-1000	1 pair
Fiber Holder for Loose Tube	S713S-250LT	1 pair
Customized Fiber Holder*6	S713X-XXX	1 pair
USB Cable	USB-01	1
Wi-Fi Dongle	WFD-01	1



Fiber Holder

\*6 Available Suitable size Fiber holder depending on the coating diameter of splicing fiber.

## FURUKAWA ELECTRIC CO., LTD.

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