

High-end Fusion Splicer
S185LDF / S185PMLDF
for LDF splicing for LDF & PM-LDF splicing



S185LDF



S185PMLDF

Fusion Splicers for LDF and PMLDF splicing up to 500µm

Low splice loss

Compact size

High capacity built-in battery (Optional)

LCD touch panel provides easy operation

Fiber clamps land gently to prevent damage to the fiber

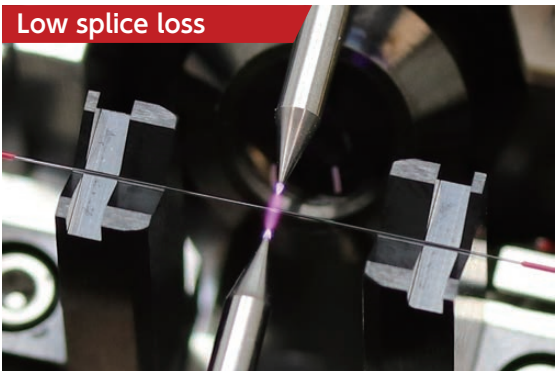
Remote control by Wi-Fi communication

The FITEL S185LDF / S185PMLDF High-end Fusion Splicers are designed for splicing up to 500µm cladding fiber with low splice loss.

The powerful and compact design has been optimized for the Fiber laser industry. The new fiber alignment mechanism achieves low splice loss. The new design allows for the fiber clamps to land gently to reduce the possibility of damage to fiber. Battery operation and a compact design make transportation easy for the LDF Fusion splicer.

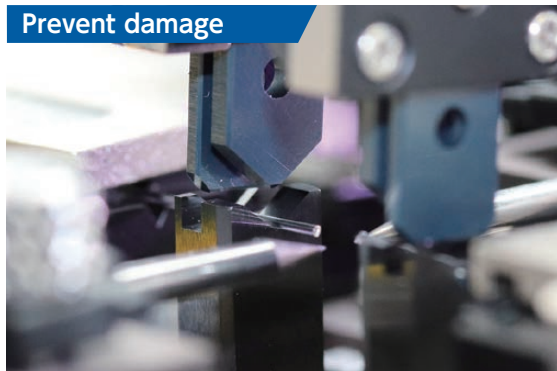
■ Features

Low splice loss



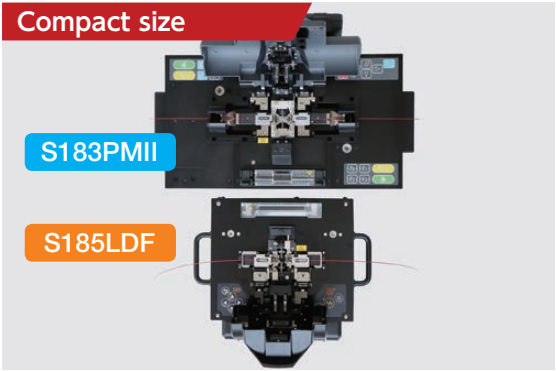
Precise alignment with resolution of 0.03μm for fiber axis.

Prevent damage



Fiber clamps land gently to prevent damage to the fiber.

Compact size



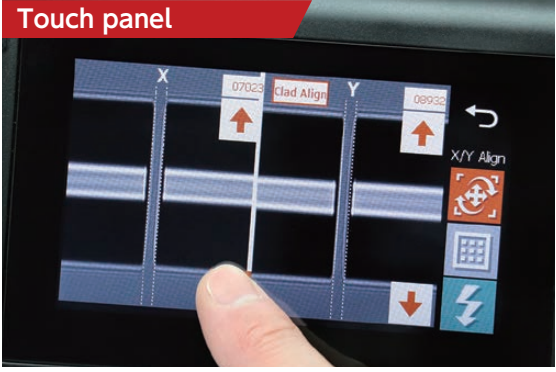
Footprint is 46% smaller than previous model.

Built-in battery



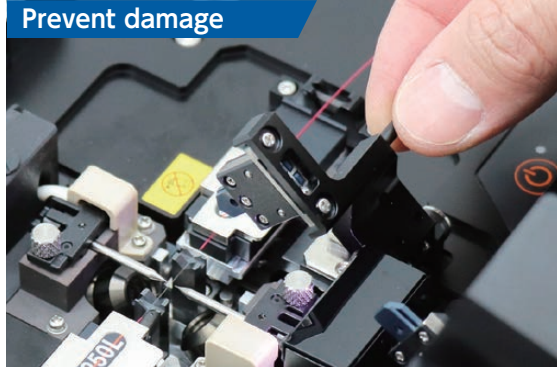
Battery operation and a compact design make transportation easy.

Touch panel



Easy and intuitive touch panel operation and GUI.

Prevent damage



Releasing the fiber clamp links allow the fiber clamps to be placed without closing the canopy.

Wi-Fi communication



Remote control is available by Wi-Fi.

Auto-flip display



Automatically adjusts image when LCD display is flipped.

Specification

| Description | S185LDF | | S185PMLDF | |
|-------------------------------------|--|--|---|--|
| | SM, MM, DS, NZDS, High-Index, EDF, LDF | | SM, MM, DS, NZDS, High-Index, EDF, LDF, PMF | |
| Applicable fibers*1 | | | 80 to 500µm | |
| Cladding diameter | | | | |
| Coating diameter | 160 to 2000µm (In Fiber holder) 160 to 900µm (Coating clamp splice) | | 160 to 1300µm (In Fiber holder) 160 to 900µm (Coating clamp splice) | |
| Fiber cleave length | 3 to 5mm (Coating clamp splice) 8 to 11mm (Cladding clamp splice) | | | |
| Typical splice loss*2 | SM(ITU-T G652): 0.014dB | | | |
| Typical extinction ratio*2 | - | | PANDA: -36.8dB*3 (Angle offset: 0.6degree) | |
| Return loss | >60dB | | | |
| Typical splice time*4 | 15s (SM by cladding clamp splice) | | 15s (SM by cladding clamp splice) 40s (PANDA by cladding clamp splice) | |
| Tension strength | 1.96 (+0% to +20%) | | | |
| Applicable protection sleeve length | 10 to 60mm | | | |
| Typical heat time | 35s (S922:40mm 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 | 104X, 278X or 556X | | | |
| Dimension | 210W x 180D x 150H mm | | | |
| Weight (without Battery) | 4.5kg | | 4.75kg | |
| 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 | | | |
| Battery capacity (Optional)*5 | Typical 60 splice / heat cycles | | | |
| Operating temperature | 0 to 40°C | | | |
| Storage temperature | -40 to 60°C | | | |
| Humidity | 0 to 90% (Non-condensing) | | | |
| Power source | AC input 100 to 240V (50/60Hz) | | | |

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

*3 Extinction ratio -36.8dB is measured in the condition that the initial extinction ratio is -40dB and there is the splice with 0.6 degree of rotation offset.

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

*5 This value can produce using fully charged brand new battery at room temperature 20 degree C. Depending on the condition of the battery and operation environment, the number can vary.

Standard package

| Item | P/N | Quantity | | | | | | | |
|-----------------------|--------------------|----------|-------|-------|-------|-----------|-------|-------|-------|
| | | S185LDF | | | | S185PMLDF | | | |
| | | -00 | -01 | -10 | -11 | -00 | -01 | -10 | -11 |
| S185LDF Main body | S185LDF-X-A-0001 | 1 | 1 | 1 | 1 | - | - | - | - |
| S185PMLDF Main body | S185PMLDF-X-A-0001 | - | - | - | - | 1 | 1 | 1 | 1 |
| Hard Carrying Case | HCC-12 | - | 1 | - | 1 | - | 1 | - | 1 |
| Built-in Battery Pack | S947B | - | - | 1 | 1 | - | - | 1 | 1 |
| AC Adapter | S981A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| AC Cable Cord | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Z Stage Lock | ZL-01 | 1pair | 1pair | 1pair | 1pair | 1pair | 1pair | 1pair | 1pair |
| Spare Electrode | ELR-03 | 1pair | 1pair | 1pair | 1pair | 1pair | 1pair | 1pair | 1pair |
| Electrode Sharpener | D5111 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Cleaning Brush | VGC-01 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| User Manual | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |



Standard Package (S185LDF)



Hard Carrying Case

Ordering number form

S185 A - B C

| Mark | Category | Code | Remark |
|------|--------------------|-------|-----------|
| A | Splicer model | LDF | S185LDF |
| | | PMLDF | S185PMLDF |
| B | Battery | 0 | None |
| | | 1 | Included |
| C | Hard carrying case | 0 | None |
| | | 1 | Included |

Optional components

| Item | P/N | Quantity |
|-----------------------------|------------|----------|
| 160μm Coating Fiber Holder | S713S-160 | 1pair |
| 250μm Coating Fiber Holder | S713S-250 | 1pair |
| 400μm Coating Fiber Holder | S713S-400 | 1pair |
| 650μm Coating Fiber Holder | S713S-650 | 1pair |
| 900μm Coating Fiber Holder | S713S-900 | 1pair |
| 1300μm Coating Fiber Holder | S713S-1300 | 1pair |
| Customized Fiber Holder*6 | S713S-XXX | 1pair |
| Hard Carrying Case | HCC-12 | 1 |
| Built-in Battery Pack*7 | S947B | 1 |
| USB Cable | USB-01 | 1 |
| Wi-Fi Dongle | WFD-01 | 1 |

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

*7 Built-in Battery Pack should be installed by the authorized distributor or the repair center in Furukawa Electric group.



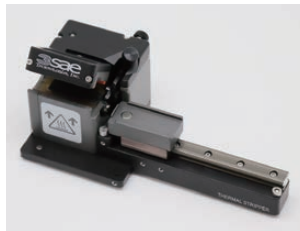
Fiber Holder

Related tools

| Item | Part Number | Specification |
|--|-------------------------|---------------------------------|
| Stripper | S218R-Plus | Cladding diameter 125μm only |
| | 3SAE Thermal Stripper | Cladding diameter 80 to 1000μm |
| Cleaver | S326A | Cladding diameter 125μm only |
| | NorthLab ProCleave LD | Cladding diameter 125 to 550μm |
| | 3SAE LCCII | Cladding diameter 125 to 1000μm |
| Cleaner | 3SAE Ultrasonic Cleaner | - |
| Protection sleeve | S921/S922 | Coating diameter 900μm or less |
| | S928A-20/25/35 | Coating diameter 400μm or less |
| Fiber end face interferometer & microscope | NorthLab Proview | Cladding diameter 125 to 720μm |



S218R-Plus



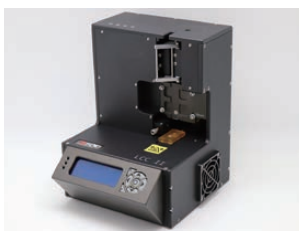
3SAE Thermal Stripper



S326A



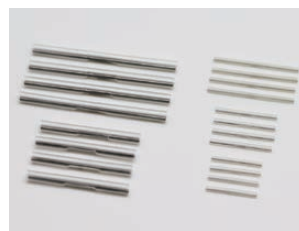
NorthLab ProCleave



3SAE LCCII



3SAE Ultrasonic Cleaner



Protection sleeve



NorthLab Proview

Contact Us :

FURUKAWA ELECTRIC CO., LTD.

Head Office:

2-3, Marunouchi 2-chome,
Chiyoda-ku, Tokyo,
100-8322, Japan
Tel: + 81 3 3286 3227
Fax: + 81 3 3286 3978
www.furukawa.co.jp
fec.abr_opt_splicer@furukawaelectric.com

Europe:

Furukawa Electric Europe Ltd.
Furukawa House
77-85 Fulham Palace Road,
London W6 8JD, U.K.
Tel: + 44 (0) 20 7313 5300
Fax: + 44 (0) 20 7313 5310
www.furukawa.co.uk
splicers@furukawa.co.uk

North & South America:

OFS Fitel, LLC
2000 Northeast Expressway
Norcross, Georgia 30071, U.S.A
Toll free: + 1 866 452 9516
Tel: + 1 678 783 1090
Fax: + 1 678 783 1093
www.ofsoptics.com
splicers@ofsoptics.com

China:

Furukawa Shanghai, Ltd.
Beijing Branch
Room 314, Beijing Fortune Building,
No.5, North Dongsanhuan Road,
Beijing 100004 P.R. China
Tel: + 86 10 8591 0608
Fax: + 86 10 8591 0609
www.furukawa-sh.cn

South East Asia:

Furukawa Electric Singapore Pte. Ltd.
60 Albert Street, #13-10 OG
Albert Complex, Singapore
189969
Tel: + 65 6224 4686
Fax: + 65 6336 2635
comms@furukawa.com.sg

* Please understand that contents of this catalog may change without notice.

Export Control Regulations

The products and/or technical information presented in this publication may be subject to the application of the Foreign Exchange and Foreign Trade Act and other related laws and regulations in Japan.

In addition, the Export Administration Regulations (EAR) of the United States may be applicable.

In cases where exporting or reexporting the products and/or technical information presented in this publication, customers are requested to follow the necessary procedures at their own responsibility and cost.

Please contact the Ministry of Economy, Trade and Industry of Japan or the Department of Commerce of the United States for details about procedures.