



High-end Fusion Splicer S185HS/S185PM



Fusion Splicers for PMF and High strength splicing

Low splice loss

Compact size

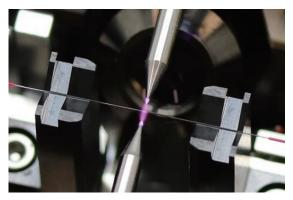
High capacity built-in battery (Optional) LCD touch panel provides easy operation Short fiber cleave length allows to use ultra mini sleeve

Remote control by Wi-Fi communication

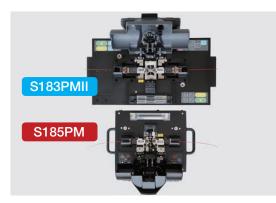
The FITEL S185HS / S185PM Highend Fusion Splicers are designed for splicing specialty fibers for factory, manufacturing and R&D applications. The compact but powerful design has been optimized for use in the optical component and optical sensor fields. By targeting the necessary functions in these applications, exceptional performance and a compact design are achieved with these High-end Fusion Splicers



Features



Precise alignment with resolution of $0.03 \mu m$ for fiber axis.



Footprint is 46% smaller than previous model.



Easy and intuitive touch panel operation and GUI.



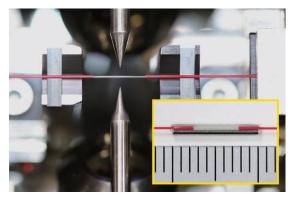
Remote control is available by Wi-Fi.



Accurate 360 degree fiber rotation with a resolution of 0.1 degree



Battery operation and a compact design make transportation easy.



Short cleave length allows to reinforce the exposed glass with ultra mini sleeve.



Automatically adjusts image when LCD display is flipped.

Specification

| Description | S185HS S185PM | | |
|-------------------------------------|--|---|--|
| Applicable fibers*1 | SM, MM, DS, NZDS, High-Index, EDF SM, MM, DS, NZDS, High-Inde | | |
| Cladding diameter | 80 to 150µm | | |
| 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: 0.6de | | |
| 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 180 | D 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

| | | Quantity | | | | | | | |
|-----------------------|---------------------|----------|-------|-------|--------|-------|-------|-------|-------|
| Item | P/N | S185HS | | | S185PM | | | | |
| | | -00 | -01 | -10 | -11 | -00 | -01 | -10 | -11 |
| S185HS Main body | S185HS- X-A-0001 | 1 | 1 | 1 | 1 | - | - | - | - |
| S185PM Main body | S185PM- 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 |

Ordering number form

S185 A - B C

| Mark | Category | Code | Remark |
|------|--------------------|------|----------|
| | | HS | S185HS |
| A | A Splicer model | PM | S185PM |
| Р | B Battery | 0 | None |
| D | | 1 | Included |
| С | Hard carrying case | 0 | None |
| | | 1 | Included |



Srtandard Package (S185PM)



Hard Carrying Case

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 | 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.

Related tools

| Item | Part Number | Specification |
|--|-------------------------|--------------------------------|
| Stripper | S218R-Plus | Cladding diameter 125µm only |
| | 3SAE Thermal Stripper | Cladding diameter 30 to 1000µm |
| Cleaver | S326S80 | Cladding diameter 80µm only |
| | S326A | Cladding diameter 125µm only |
| | NorthLab ProCleave SD | Cladding diameter 125 to 230µm |
| 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



NorthLab ProCleave



3SAE Thermal Stripper



3SAE Ultrasonic Cleaner



S326S80



Protection sleeve





NorthLab Proview

Contact Us : FURUKAWA ELECTRIC CO., LTD.

Europe:

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

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, 60 Albert Street, #13-10 OG 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.

Albert Complex, Singapore 189969 Tel: + 65 6224 4686 Fax: + 65 6336 2635 comms@furukawa.com.sq

* 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.

