

High-end Fusion Splicer **S185HS/S185PM**



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

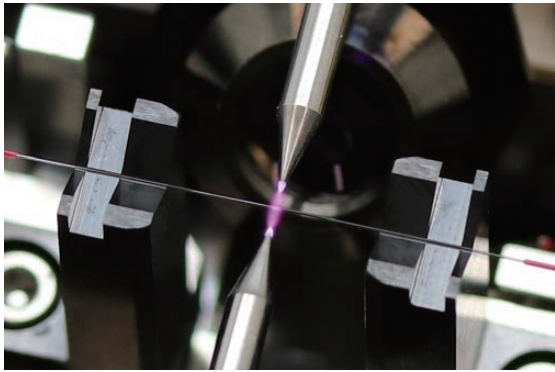
Short fiber cleave length allows to use ultra mini sleeve

Remote control by Wi-Fi communication

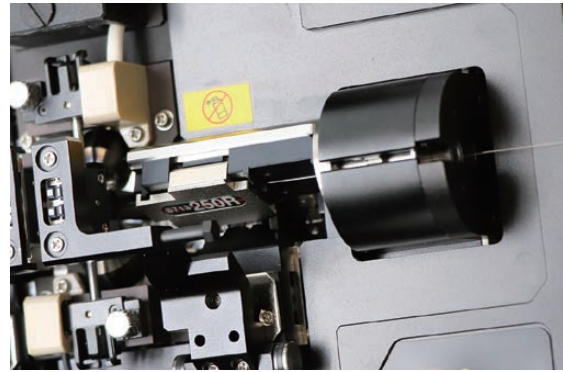
The FITEL S185HS / S185PM High-end Fusion Splicers are designed for splicing specialty fibers for factory, manufacturing and R&D applications.

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

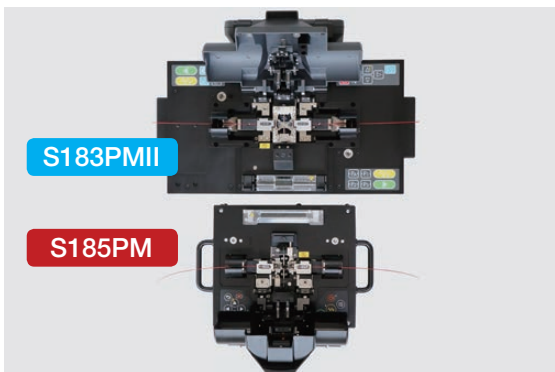
■ Features



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



Accurate 360 degree fiber rotation with a resolution of 0.1 degree



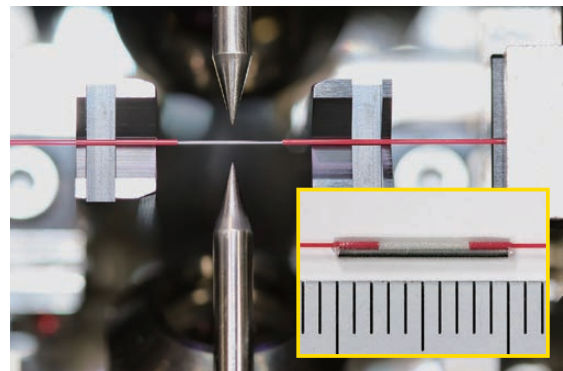
Footprint is 46% smaller than previous model.



Battery operation and a compact design make transportation easy.



Easy and intuitive touch panel operation and GUI.



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



Remote control is available by Wi-Fi.



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-Index, EDF, PMF |
| 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: 0.6degree) |
| 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 | | | | | | | |
|-----------------------|-----------------|----------|-------|-------|-------|--------|-------|-------|-------|
| | | 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 |



Standard Package (S185PM)



Hard Carrying Case

Ordering number form

S185 A - B C

| Mark | Category | Code | Remark |
|------|--------------------|------|----------|
| A | Splicer model | HS | S185HS |
| | | PM | S185PM |
| 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 | S947B | 1 |
| 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.

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



3SAE Thermal Stripper



S326S80



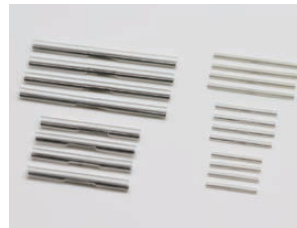
S326A



NorthLab ProCleave



3SAE Ultrasonic Cleaner



Protection sleeve



NorthLab Proview

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