



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



Fusion Splicers for LDF and PMLDF splicing up to 500µm

Low splice loss

Compact size

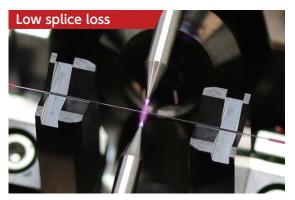
High capacity built-in battery (Optional) LCD touch panel provides easy operation Fiber clamps land gently to prevent damage to the fiber

Remote control by Wi-Fi communication

The FITEL S185LDF / S185PMLDF Highend 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.

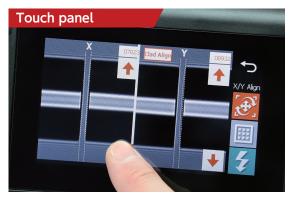
Features



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.



Fiber clamps land gently to prevent damage to the fiber.



Battery operation and a compact design make transportation easy.



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



Automatically adjusts image when LCD display is flipped.

Specification

| Description | S185LDF S185PMLDF | | |
|-------------------------------------|---|---|--|
| Applicable fibers*1 | SM, MM, DS, NZDS, High-Index, EDF, LDF | SM, MM, DS, NZDS, High-Index, EDF, LDF, PMF | |
| Cladding diameter | 80 to 500µm | | |
| Coating diameter | 160 to 2000µm (In Fiber holder) 160 to 1300µm (In Fiber 160 to 900µm (Coating clamp splice) 160 to 900µm (Coating clamp splice) | | |
| Fiber cleave length | 3 to 4mm (Coating clamp splice) 8 to 11mm (Cladding clamp splice) | | |
| Typical splice loss*2 | SM(ITU-T G652): 0.014dB | | |
| Typical extinction ratio*2 | – PANDA: 40dB*3 (Angle offset: 0.6deg | | |
| 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 40dB is measured in the condition that the initial extinction ratio is more than 50dB 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 | 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 |

Ordering number form

S185 A - B C

| Mark | Category | Code | Remark | |
|-----------------|--------------------|-----------|----------|--|
| ٨ | Culia ar madal | LDF | S185LDF | |
| A Splicer model | PMLDF | S185PMLDF | | |
| | B Battery | 0 | None | |
| D | | 1 | Included | |
| С | Hard carrying case | 0 | None | |
| | | 1 | Included | |



Standard Package (S185LDF)



Hard Carrying Case

Optional components

| Item | P/N | Quantity |
|---------------------------------------|------------|----------|
| | | , |
| 160µm Coating Fiber Holder | S713S-160 | 1pair |
| 250µm Coating Fiber Holder | S713S-250 | 1pair |
| 300µm Coating Fiber Holder | S713S-300 | 1pair |
| 400µm Coating Fiber Holder | S713S-400 | 1pair |
| 550µm Coating Fiber Holder | S713S-550 | 1pair |
| 650µm Coating Fiber Holder | S713S-650 | 1pair |
| 900µm Coating Fiber Holder | S713S-900 | 1pair |
| 1300µm Coating Fiber Holder | S713S-1300 | 1pair |
| 550µm Coating BW Fiber Holder | S713B-550 | 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 |



Fiber Holder

*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.

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 LCCII



3SAE Thermal Stripper



3SAE Ultrasonic Cleaner



S326A



Protection sleeve



NorthLab ProCleave



NorthLab Proview

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