

# Single Fiber Arc Fusion Splicer FSM-18S

Rain  
Resistant

Dust  
Resistant

Shock  
Resistant

## Features

- Single fiber splicing.
- Cladding alignment with fixed v-grooves.
- Environmental resistant features.
- Arc calibration-free system.
- 4.1" TFT color LCD monitor.
- Dual directional operation system.
- Long life battery.
- Software upgrade via Internet.
- Detachable work table (attached to carrying case).



Single Fiber Arc Fusion Splicer **FSM-18S**



**SPECIFICATIONS**

|                                  |  |
|----------------------------------|--|
| Applicable type of fibers        | SM (ITU-T G.652) , MM (ITU-T G.651) , DS (ITU -T G.653) , NZDS (ITU-T G.655)   |
| Fiber count                      | Single   |
| Applicable fiber dimensions      | Cladding diameter : 125 $\mu$ m,<br>Coating diameter 250 to 1000 $\mu$ m   |
| Fiber setting and cleaved length | Sheathe clamp A (standard) : For coating dia. up to 250 $\mu$ m (8 to 16mm cleave) , coating dia. of over 250 $\mu$ m (16 $\mu$ m cleave)<br>Sheathe clamp B (option) : For coating dia. up to 1000 $\mu$ m (8 to 16mm cleave)<br>Sheathe clamp C (option) : For 900 $\mu$ m dia. loose tube fiber (8 to 16mm cleave)<br>Fiber holder (option) : FH-60-250 and FH-60-900 (10mm cleave) |
| Splicing modes                   | Total 100 modes  |
| Typical splice loss              | 0.05dB with SM, 0.02dB with MM, 0.08dB with DS, 0.08dB with NZDS.<br>(Measured by cut-back method relevant to ITU-T standard).   |
| Return loss                      | >>60dB   |
| Splicing time                    | Typical 11sec. with standard SM (ITU-T G.652)  |
| Splice loss estimate             | Available  |
| Tube heater / heating time       | Built-in tube heater with 30 heating modes. / Typical 30sec with Fujikura FP-03.   |
| Applicable protection sleeve     | 60mm, 40mm and Fujikura FPS01 series   |
| Storage of splice result         | The last 2000 results to be stored in the internal memory.   |
| Tension test                     | 1.96 to 2.25N  |
| Operating condition              | 0 to 3660m above sea level, 0 to 95%RH and -10 to 50 degC and up to 15m/s wind velocity, respectively.   |
| Storage condition                | 0 to 95%RH and -40 to 80 degC respectively.<br>Battery : -20 to 30 degC for long term.   |
| Dimensions                       | 136W×161D×143H [mm] excluding rubber foot.   |
| Weight                           | 2.1kg with AC adaptor ADC-13, 2.5kg with battery BTR-08.   |
| Viewing method and display       | Two CMOS cameras and 4.1" color LCD monitor.   |
| Fiber view and magnification     | X / Y (300X magnification) , or both X and Y simultaneously (187X magnification) .   |
| No.of splice cycles with battery | Typical 150 cycles (splice / tube heat) with BTR-08.   |
| Power supply                     | Applicable voltage from 100 to 240V AC or 10 to 15V DC with ADC-13. 13.2V DC with BTR-08.  |
| Electrode life                   | 2000 arc-discharges  |
| Terminals                        | USB 1.1 (Mini-B type) connector for PC communication.<br>6-pin Mini-DIN connector for HJS-02, HJS-03 or SH-8C power supply.  |

**STANDARD PACKAGE**

| Description                  | Model No.  | Q'ty  |
|------------------------------|--|-------|
| Arc Fusion Splicer           | FSM-18S<br>With CLAMP-S60A, ELCT2-20A and WPM-08 | 1pc.  |
| AC adapter / battery charger | ADC-13   | 1pc.  |
| AC power cord                | ACC-XX   | 1pc.  |
| Spare electrodes             | ELCT2-20A  | 1pair |
| USB cable                    | USB-01   | 1pc.  |
| Quick reference guide        | M-60S/18S-E                                      | 1pc.  |
| Video instruction manual     | V-18S-E  | 1pc.  |
| Warnings and Cautions        | W-60-E   | 1pc.  |
| J plate                      | JP-05  | 1pc.  |
| Carrying case                | CC-24-18S  | 1pc.  |

**OPTIONAL ITEMS**

| Description           | Model No.  |
|-----------------------|--|
| Fiber holder *1       | FH-60-250 (coating dia. of 250 $\mu$ m)<br>FH-60-900 (coating dia. of 900 $\mu$ m) |
| Sheath clamp *1       | CLAMP-S60A (standard package)<br>CLAMP-S60B<br>CLAMP-S60C                          |
| Battery pack          | BTR-08   |
| Battery charge cord   | DCC-14   |
| DC power cord         | DCC-12 (for cigar-socket)<br>DCC-13 (with alligator clamp)                         |
| Magnifier             | MG5-06   |
| Electrodes            | ELCT2-20A  |
| Wind protector mirror | WPM-08   |

\*1:See "Fiber cleaved length" in SPECIFICATIONS for detail.

**ACCESSORIES**

| Description                  | Model No.                         |
|------------------------------|-----------------------------------|
| High precision fiber cleaver | CT-30 series                      |
| Primary coat stripper        | PS-02                             |
| Nylon jacket stripper        | JS-01                             |
| Hot jacket stripper          | HJS-02, HJS-03                    |
| External tube heater         | SH-8C (for FuseConnect™ option)   |
| Alcohol dispenser            | HR-2                              |
| Protection sleeve            | FP-03 / 03 (L=40) and FPS01series |

**RESISTANCE FEATURES**

| Description      | Detail  |
|------------------|---|
| Shock resistance | 76cm (30inch) bottom surface drop.*2                            |
| Dust resistance  | Exposure to dust (0.1 to 500 $\mu$ m dia. Alumina Silicate) .*2 |
| Rain resistance  | R=10mm/h for 10min.*2   |

\*2:Carried out in Fujikura labs in Japan. The shock resistance, dust resistance and rain resistance test do not guarantee that the product will not be damaged under these conditions.\*

**STANDARD PACKAGE & OPTIONAL ITEMS**



**TOP VIEW**



**MG5-06**



**DETACHABLE WORK TABLE**



Specifications and descriptions are subject to change without prior notice.

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