

# 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, 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) Sheathe clamp B (option) : For coating dia. up to 1000 $\mu$ m (8 to 16mm cleave) Sheathe clamp C (option) : For 900 $\mu$ m dia. loose tube fiber (8 to 16mm cleave) 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. (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. 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. 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 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) FH-60-900 (coating dia. of 900 $\mu$ m)
Sheath clamp *1	CLAMP-S60A (standard package) CLAMP-S60B CLAMP-S60C
Battery pack	BTR-08
Battery charge cord	DCC-14
DC power cord	DCC-12 (for cigar-socket) DCC-13 (with alligator clamp)
Magnifier	MGs-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



## MGs-06



## DETACHABLE WORK TABLE



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