

# Single Fiber Arc Fusion Splicer *FSM-60S*

Rain  
Resistant

Dust  
Resistant

Shock  
Resistant

## Features

- Core to core alignment by PAS (Profile Alignment System) technology.
- Environmental resistant features.
- World's most compact and lightest of its class.
- Arc calibration-free system.
- 4.1" TFT color LCD monitor.
- Dual directional operation system.
- Long life battery.
- Fiber holder option.
- Software upgrade via Internet.
- Detachable work table (attached to carrying case).



# Single Fiber Arc Fusion Splicer **FSM-60S**



## 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) and other single mode fibers including ITU-T G.657 fibers.
Fiber count	Single
Applicable fiber dimensions	Cladding diameter : 80 to 150 $\mu$ m. Coating diameter : 100 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	0.02dB with SM, 0.01dB with MM, 0.04dB with DS and 0.04dB with NZDS. (Measured by cut-back method relevant to ITU-T standard)
Return loss	>>60dB
Splicing time	Typical 9sec. with SM FAST, 10sec. with SM AUTO and 13sec with AUTO modes with standard SM (ITU-T G.652).
Splice loss estimate	Available
Attenuation splice function	Intentional high splice loss of 0.1dB to 15dB (0.1dB step) can be made for an in-line fixed attenuator.
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 5,000m 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	2.3kg with AC adaptor ADC-13, 2.7kg 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)
Power supply	Applicable voltage from 100 to 240V AC or 10 to 15V DC with ADC-13. 13.2V DC with BTR-08.
No. of splice cycles with battery	Typical 160 cycles (splice / tube heat) with BTR-08.
Electrode life	2500 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-60S 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-60S-E	1pc.
Warnings and Cautions	W-60-E	1pc.
J plate	JP-05	1pc.
Carrying case	CC-24-60S	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	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 FPS01 series

## 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.

**Fujikura Ltd.**

1-5-1, Kiba, Koto-ku, Tokyo 135-8512, Japan  
Phone:+81-3-5606-1164 Fax:+81-3-5606-1534 <http://www.fujikura.co.jp>

**Fujikura Asia Ltd.**

460, Alexandra Road, #22-02 PSA Bldg., Singapore 119963  
Phone:+65-6-278-8955 Fax:+65-6-278-0965 <http://www.fujikura.co.sg>

**Fujikura Europe Ltd.**

C51 Barwell Business Park, Leatherhead Road, Chessington, Surrey KT9 2NY, UK  
Phone:+44-20+8240-2000 Fax:+44-20-8240-2010 <http://www.fujikura.co.uk>

**AFL Telecommunications**

260, Parkway East, Duncun, SC29334, USA  
Phone:+1-800-235-3423 Fax:+1-800-926-0007 <http://www.afltele.com>