

# Ribbon Fiber Arc Fusion Splicer

# FSM-18R

Rain  
Resistant

Dust  
Resistant

Shock  
Resistant



## Features

- Up to 4-fiber ribbon 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).



## 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, 2 and 4
Applicable fiber dimensions	Ribbon : Cladding diameter 125 $\mu$ m, Ribbon fiber thickness 0.25 to 0.4mm Single : Cladding diameter 125 $\mu$ m, Coating diameter 250 $\mu$ m and 900 $\mu$ m
Fiber cleaved length	10mm
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 20sec. with standard SM (ITU-T G.652)
Splice loss estimate	Available
Tube heater / heating time	Built-in tube heater with 30 heating modes. / Typical 40sec with Fujikura FP-04T and 50sec with FP-05.
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 5000m 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 adapter 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 (90X magnification) , or both X and Y simultaneously (90X magnification) .
No. of splice cycles with battery	Typical 90 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	1500 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-18R	1pc.
	With ELCT2-20A and WPM-08	
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-60R/18R-E	1pc.
Video instruction manual	V-18R-E	1pc.
Warnings and Cautions	W-60-E	1pc.
J plate	JP-05	1pc.
Carrying case	CC-24-18R	1pc.

## OPTIONAL ITEMS

Description	Model No.
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

## ACCESSORIES

Description	Model No.
High precision fiber cleaver	CT-30
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) , FP-04 (T) , FP-05 and FPS01 series

## OPTIONAL FIBER HOLDERS

Fiber	Single (250 $\mu$ m)	Single (900 $\mu$ m)	2-fiber ribbon	4-fiber ribbon
Model No.	FH-50-250 FH-60-250	FH-50-900 FH-60-900	FH-50-2	FH-50-4

## RESISTANCE FEATURES

Description	Detail
Shock resistance	76cm (30inch) bottom surface drop.*1
Dust resistance	Exposure to dust (0.1 to 500mm dia. Alumina Silicate) .*1
Rain resistance	R=10mm/h for 10min.*1

\*1: 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>