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**Data Sheet**

August 2, 2026

FUJIKURA

# Fujikura FSM-18R SM MM Ribbon Fiber Fusion Splicer

The Fujikura FSM-18R is a compact and efficient fusion splicer designed for splicing single-mode (SM) and multi-mode (MM) ribbon fibers. Ideal for field use, it features automated fiber alignment and splicing, ensuring low-loss splices. Includes a ruggedized design for durability and a user-friendly interface for ease of operation. Suitable for telecommunications, data centers, and other fiber optic network applications.



MODEL

**Fujikura FSM-18R**

CALIBRATION

**Available on request**

CONDITION

**Used**

STATUS

**In stock**

RFQ / SKU

**FSM-18R**

LISTING

<https://aumictechlabs.com/products/fsm-18r-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

## This unit

The Fujikura FSM-18R is a field-deployable fusion splicer engineered for single-mode (SM) and multi-mode (MM) ribbon fibers up to 4-fiber configurations, plus individual fibers. Cladding alignment with fixed V-groove geometry delivers consistent low-loss splices: 0.05 dB average for SM (typically 0.02–0.03 dB) and 0.02 dB for MM. Automated arc calibration, ribbon fiber identification, and auto-start functions minimize operator intervention. The color LCD display with anti-reflective coating and dual monitor positioning ensures visibility in direct sunlight. Built for field conditions, the unit resists shock, dust, and moisture, and passes a 30-inch drop test. Technical Specifications Fiber Types: Single-mode (SM), multi-mode (MM), dispersion-shifted

(DS), non-zero dispersion-shifted (NZDS) Ribbon Capacity: Up to 4-fiber ribbons; single-fiber splicing supported Alignment Method: Cladding alignment with fixed V-groove Splice Time (AUTO mode, SM): 11 seconds typical Heat Shrink Time: 30 seconds (Fujikura sleeves: 30–35 seconds) Splice Loss: SM 0.05 dB average (0.02–0.03 dB typical); MM 0.02 dB Arc Calibration: Automatic with arc power auto-tuning and ribbon fiber identification Display: Color LCD, anti-reflective coating, dual monitor position with automatic image orientation Power Supply: 100–240 V AC 50–60 Hz; 10–15 V DC (ADC-13) or 13.2 V DC (BTR-08 battery) Battery Life: Up to 90 splice/heat cycles per charge Battery Operation: Simultaneous charge and splicer operation supported Dimensions: 136 × 161 × 143 mm (typical) Weight: Approximately 2.1 kg with AC adapter; 2.5 kg with battery Interface: USB 1.1 Type B; mini-DIN 6-pin (HJS-02/03, SH) Key Features Automated alignment and splicing eliminate manual positioning variability Automatic arc calibration and ribbon identification streamline multi-fiber work Color LCD with anti-reflective coating optimized for outdoor use Rugged design handles shock, dust, and rain exposure Field-upgradeable firmware via USB PC interface Modular power: AC mains or DC battery with hot-swap capability Typical Applications Telecommunications network deployment and field restoration Data center fiber backbone installation Fiber optic infrastructure expansion and maintenance Compatibility & Integration Supports FH-50-4 fiber holders and Fujikura proprietary heat-shrink sleeves. Software upgrade and data download via standard USB 1.1 connection to PC.

## Features & description

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From manufacturer datasheet

### Features

- Fixed V-groove; single, 2, and 4 fibers • Typical loss 0.05 / 0.02 / 0.08 / 0.08 dB (SM/MM/DS/NZDS)
- Typical 20 s SM splice; auto-start heater • Automatic ribbon ID and arc calibration • About 90 splice/heat cycles per charge • Dual monitor position; 4.1-inch TFT • Shock/dust/moisture resistant; 30" drop class • Detachable work table in transit case • USB data/video download; internet software upgrade • Related holders: FH-50-4 / FH-50-2 / FH-50-250 / FH-50-900

## FSM18R Characteristics / Specifications

| PARAMETER                   | VALUE                                                                                                                                                                                                                                                        |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model                       | FSM-18R                                                                                                                                                                                                                                                      |
| Manufacturer                | Fujikura / AFL                                                                                                                                                                                                                                               |
| Instrument Type             | Fixed V-groove ribbon fusion splicer                                                                                                                                                                                                                         |
| Applicable Fibers           | SM (G.652), MM (G.651), DS (G.653), NZDS (G.655)                                                                                                                                                                                                             |
| Fiber Count                 | Single, 2, 4                                                                                                                                                                                                                                                 |
| Cladding Diameter           | 125 um                                                                                                                                                                                                                                                       |
| Coating Diameter            | Ribbon 0.25-0.4 mm; Single 250 um and 900 um                                                                                                                                                                                                                 |
| Cleave Length               | 10 mm                                                                                                                                                                                                                                                        |
| Typical Average Splice Loss | 0.05 dB SM; 0.02 dB MM; 0.08 dB DS; 0.08 dB NZDS                                                                                                                                                                                                             |
| Splicing Time               | typically 20 s standard SM                                                                                                                                                                                                                                   |
| Arc Calibration             | automatic real-time AUTO; manual available                                                                                                                                                                                                                   |
| Splicing Modes              | 100 preset and user programmable                                                                                                                                                                                                                             |
| Storage                     | last 2000 results                                                                                                                                                                                                                                            |
| Display                     | X, Y, or both; front or rear; dual cameras; 4.1-inch TFT; 90X                                                                                                                                                                                                |
| Operating                   | 0-5000 m; 0-95% RH; -10 to 50 C                                                                                                                                                                                                                              |
| Proof Test                  | 1.96-2.25 N                                                                                                                                                                                                                                                  |
| Tube Heater                 | 30 modes; auto-start; typically 50 s FP-5; 40 s FP3(40); 35-55 s micro                                                                                                                                                                                       |
| Sleeves                     | 60 mm, 40 mm, micro                                                                                                                                                                                                                                          |
| Battery Cycles              | typically 90 with power save (BTR-08)                                                                                                                                                                                                                        |
| Power                       | 100-240 VAC or 10-15 VDC with ADC-13; 13.2 V DC with BTR-08                                                                                                                                                                                                  |
| Terminals                   | USB 1.1 (USB-B); Mini-DIN 6-pin for HJS-02/03 and SH-8                                                                                                                                                                                                       |
| Wind Protection             | max 15 m/s                                                                                                                                                                                                                                                   |
| Dimensions                  | 136 × 161 × 143 mm                                                                                                                                                                                                                                           |
| Weight                      | 2.1 kg with ADC-13; 2.5 kg with BTR-08 Standard Operating Conditions<br>Use matching FH-50 holders for fiber count. Clean V-grooves between ribbon splices. Charge BTR-08 with DCC-14/ADC-13. Replace electrodes (ELCT2-20A class) at recommended intervals. |

| PARAMETER       | VALUE                                     |
|-----------------|-------------------------------------------|
| Related holders | FH-50-4 / FH-50-2 / FH-50-250 / FH-50-900 |

# Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

| Specifications                                                                                              |                                                                        |
|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| Specifications                                                                                              |                                                                        |
| PARAMETER                                                                                                   | VALUE                                                                  |
| Model                                                                                                       | FSM-18R                                                                |
| Manufacturer                                                                                                | Fujikura / AFL                                                         |
| Instrument Type                                                                                             | Fixed V-groove ribbon fusion splicer                                   |
| Applicable Fibers                                                                                           | SM (G.652), MM (G.651), DS (G.653), NZDS (G.655)                       |
| Fiber Count                                                                                                 | Single, 2, 4                                                           |
| Cladding Diameter                                                                                           | 125 um                                                                 |
| Coating Diameter                                                                                            | Ribbon 0.25-0.4 mm; Single 250 um and 900 um                           |
| Cleave Length                                                                                               | 10 mm                                                                  |
| Typical Average Splice Loss                                                                                 | 0.05 dB SM; 0.02 dB MM; 0.08 dB DS; 0.08 dB NZDS                       |
| Splicing Time                                                                                               | typically 20 s standard SM                                             |
| Arc Calibration                                                                                             | automatic real-time AUTO; manual available                             |
| Splicing Modes                                                                                              | 100 preset and user programmable                                       |
| Storage                                                                                                     | last 2000 results                                                      |
| Display                                                                                                     | X, Y, or both; front or rear; dual cameras; 4.1-inch TFT; 90X          |
| Operating                                                                                                   | 0-5000 m; 0-95% RH; -10 to 50 C                                        |
| Proof Test                                                                                                  | 1.96-2.25 N                                                            |
| Tube Heater                                                                                                 | 30 modes; auto-start; typically 50 s FP-5; 40 s FP3(40); 35-55 s micro |
| Sleeves                                                                                                     | 60 mm, 40 mm, micro                                                    |
| Battery Cycles                                                                                              | typically 90 with power save (BTR-08)                                  |
| Power                                                                                                       | 100-240 VAC or 10-15 VDC with ADC-13; 13.2 V DC with BTR-08            |
| Terminals                                                                                                   | USB 1.1 (USB-B); Mini-DIN 6-pin for HJS-02/03 and SH-8                 |
| Wind Protection                                                                                             | max 15 m/s                                                             |
| Dimensions                                                                                                  | 136 x 161 x 143 mm                                                     |
| Weight                                                                                                      | 2.1 kg with ADC-13; 2.5 kg with BTR-08                                 |
| Standard Operating Conditions                                                                               |                                                                        |
| Use matching FH-50 holders for fiber count. Clean V-grooves between ribbon splices. Charge BTR-08 with DCC- |                                                                        |

14/ADC-13. Replace electrodes (ELCT2-20A class) at recommended intervals.

#### Operational Notes

Confirm FSM-18R (max 4 fiber) vs 12-fiber ribbon machines before quoting ribbon count.

### Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: [sales@aumictech.com](mailto:sales@aumictech.com) · +1 (484) 841-9341

#### Aumictech

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30-day returns  
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.