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**Data Sheet**

August 8, 2026

FUJIKURA

# Fujikura FSM-80S Core Alignment Fusion Splicer

The Fujikura FSM-80S is a core alignment fusion splicer designed for splicing single-mode, multimode, dispersion-shifted, and other specialty fibers. It features a fully automated splicing process, precise core alignment, and fast heating time. The FSM-80S is a reliable tool for telecommunications, data centers, and other fiber optic applications.



MODEL

**Fujikura FSM-80S**

CALIBRATION

**Available on request**

CONDITION

**Used**

STATUS

**In stock**

RFQ / SKU

**FSM-80S**

LISTING

<https://aumictechlabs.com/products/fsm-80s-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

## This unit

The Fujikura FSM-80S is a single-fiber core alignment fusion splicer engineered for precise splicing across SM, MM, DS, and NZDS fiber types. It delivers consistently low splice loss - 0.02 dB (SM), 0.01 dB (MM), 0.04 dB (DS/NZDS) - with return loss  $\geq 60$  dB. The unit combines automated splicing modes with dual CMOS camera viewing (300 $\times$  and 160 $\times$  magnification) for accurate core alignment and real-time monitoring. Technical Specifications Applicable Fibers: SM (ITU-T G.652, G.657); MM (G.651); DS (G.653); NZDS (G.655) Cladding Diameter: 80–150  $\mu$ m Coating Diameter: 100–1000  $\mu$ m Cleaved Length: 5–16 mm (Sheath Clamp A, B) or 5–13 mm (FH-60-250, FH-60-900) Splice Loss (Actual Average): 0.02 dB (SM), 0.01 dB (MM), 0.04 dB (DS), 0.04 dB (NZDS) Splice Time: 7 s (SM FAST), 12 s (SM AUTO), 15 s (AUTO) Return Loss:  $\geq 60$  dB Splicing Modes: 100 available Attenuation Splice Function: 0.1–15 dB (0.01 dB steps) for inline fixed attenuators Memory: Last 2000 splice results Magnification: 300 $\times$  (X/Y separate) or 160 $\times$  (X and

Y simultaneous) Tension Test: 1.96–2.25 N Tube Heat Time: 13–15 s with FP-03 protection sleeve  
Protection Sleeve Lengths: 60 mm, 40 mm, micro series Electrode Life: 3000–5000 arc-  
discharges Power Supply: 100–240 V ac or 10–15 V dc (ADC-18); 14.8 V dc (BTR-09 battery)  
Battery Capacity: ~200 splice/heat cycles per BTR-09 Operating Altitude: 0–5000 m Operating  
Temperature: –10 to +50 °C Humidity: 0–95% RH Wind Protection: Up to 15 m/s Tube Heater:  
Auto-start with 10 standard modes (expandable to 20; 30 total storable) Interface: USB 2.0 Mini-B  
for data and videoKey Features Dual CMOS cameras enable simultaneous fiber core viewing and  
accurate alignment Splice loss estimation accounts for core deformations and axis offset 100  
programmable splicer modes support diverse fiber geometries Built-in auto-start tube heater with  
multiple heating modes Field-rated construction: operates –10 to +50 °C, survives 0–95% RH  
Compact form factor: 146(W) × 159(D) × 150(H) mmCompatibility & Integration USB 2.0 Mini-B  
connection allows data export and video logging to external systems. Compatible with FP-03  
protection sleeves and both Sheath Clamp (A, B) and FH-60 fiber holders.

## Features & description

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From manufacturer datasheet

### Features

- Applicable fibers: SM (G.652/G.657), MM (G.651), DS (G.653), NZDS (G.655), others
- Fiber count: single; cladding 80–150  $\mu\text{m}$ ; coating 100–1000  $\mu\text{m}$
- Cleave length: 5–16 mm (sheath clamp) / 5–13 mm (FH-60 holders)
- Average splice loss: 0.02 dB SM; 0.01 dB MM; 0.04 dB DS/NZDS
- Splice time: 7 s SM FAST; 12 s SM AUTO; 15 s AUTO
- Return loss:  $\geq 60$  dB; 100 splice modes; attenuation splice 0.1–15 dB
- Tube heater: auto-start;  $\sim 13$ –15 s with FP-03; 30 heating modes
- Storage: last 2000 splice results; electrode life 3000 arcs
- Battery: BTR-09  $\approx 200$  splice+heat cycles; weight 2.7 kg with battery
- Size: 146  $\times$  159  $\times$  150 mm; wind protection to 15 m/s
- Operating:  $-10$  to  $50$   $^{\circ}\text{C}$ ; 0–95% RH; 0–5000 m altitude
- USB 2.0 Mini-B for data/video

## FSM80S Characteristics / Specifications

| PARAMETER           | VALUE                                                                                                                                                                                                                                                      |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model               | FSM-80S                                                                                                                                                                                                                                                    |
| Manufacturer        | Fujikura                                                                                                                                                                                                                                                   |
| Instrument Type     | Core Alignment Fusion Splicer                                                                                                                                                                                                                              |
| Family              | Fujikura FSM-80 Series                                                                                                                                                                                                                                     |
| Alias               | FSM-80S; Fujikura 80S Optical / Mechanical Core alignment; 7 s / 14 s class; SM/MM/DS/NZDS Operational Notes Prefer Fujikura FSM-80S datasheet. Confirm cleaver (CT-30/CT-05) and holder set for coating diameter in use.                                  |
| Applicable fibers   | SM (G.652/G.657), MM (G.651), DS (G.653), NZDS (G.655), others                                                                                                                                                                                             |
| Fiber count         | single; cladding 80–150 µm; coating 100–1000 µm                                                                                                                                                                                                            |
| Cleave length       | 5–16 mm (sheath clamp) / 5–13 mm (FH-60 holders)                                                                                                                                                                                                           |
| Average splice loss | 0.02 dB SM; 0.01 dB MM; 0.04 dB DS/NZDS                                                                                                                                                                                                                    |
| Splice time         | 7 s SM FAST; 12 s SM AUTO; 15 s AUTO                                                                                                                                                                                                                       |
| Return loss         | ≥60 dB; 100 splice modes; attenuation splice 0.1–15 dB                                                                                                                                                                                                     |
| Tube heater         | auto-start; ~13–15 s with FP-03; 30 heating modes                                                                                                                                                                                                          |
| Storage             | last 2000 splice results; electrode life 3000 arcs                                                                                                                                                                                                         |
| Battery             | BTR-09 ≈200 splice+heat cycles; weight 2.7 kg with battery                                                                                                                                                                                                 |
| Size                | 146 × 159 × 150 mm; wind protection to 15 m/s                                                                                                                                                                                                              |
| Operating           | –10 to 50 °C; 0–95% RH; 0–5000 m altitude                                                                                                                                                                                                                  |
| Attenuation         | splice 0.1–15 dB - Tube heater: auto-start; ~13–15 s with FP-03; 30 heating modes - Storage: last 2000 splice results; electrode life 3000 arcs - Battery: BTR-09 ≈200 splice+heat cycles; weight 2.7 kg with battery - Size: 146 × 159 × 150 mm; wind pro |

# FSM80S Specifications

| PARAMETER                | VALUE                                                                                                        |
|--------------------------|--------------------------------------------------------------------------------------------------------------|
| Key Features             | - Applicable fibers: SM (G.652/G.657), MM (G.651), DS (G.653), NZDS (G.655), others                          |
| Technical Specifications | Model: FSM-80S                                                                                               |
| Optical / Mechanical     | Core alignment; 7 s / 14 s class; SM/MM/DS/NZDS                                                              |
| Operational Notes        | Prefer Fujikura FSM-80S datasheet. Confirm cleaver (CT-30/CT-05) and holder set for coating diameter in use. |

# 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-80S                       |
| Manufacturer    | Fujikura                      |
| Instrument Type | Core Alignment Fusion Splicer |
| Family          | Fujikura FSM-80 Series        |
| Alias           | FSM-80S; Fujikura 80S         |

Optical / Mechanical

Core alignment; 7 s / 14 s class; SM/MM/DS/NZDS

Operational Notes

Prefer Fujikura FSM-80S datasheet. Confirm cleaver (CT-30/CT-05) and holder set for coating diameter in use.

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