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Data Sheet

August 2, 2026

FUJIKURA

Fujikura FSM-18S SM MM Fiber Fusion Splicer

The Fujikura FSM-18S is a compact and efficient fusion splicer designed for both single-mode and multimode fibers. It features a user-friendly interface, fast splicing times, and precise fiber alignment, making it suitable for field and laboratory applications. The FSM-18S ensures low-loss splices with its advanced image processing and automated splice functions.



MODEL

Fujikura FSM-18S

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

FSM-18S

LISTING

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

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Fujikura FSM-18S is a single-fiber arc fusion splicer engineered for field deployment in FTTx, PON, and access network installations. It combines fixed V-groove cladding alignment with dual CMOS camera imaging to deliver consistent low-loss splices across multiple fiber types. The unit's rugged construction resists shock, dust, and moisture, while its compact form factor (136 mm × 161 mm × 143 mm) suits mobile and confined workspace operation. Technical Specifications Applicable Fibers: SM (ITU-T G.652), MM (ITU-T G.651), DS (ITU-T G.653), NZDS (ITU-T G.655) Cladding Diameter: 125 μm Coating Diameter: 250 μm to 1000 μm Average Splice Loss: 0.05 dB (SM), 0.02 dB (MM), 0.08 dB (DS), 0.08 dB (NZDS) Return Loss: ≥60 dB Splicing Time: 11 seconds typical (SM) Mechanical Proof Test: 1.96–2.25 N Arc-Discharges per Electrode Pair: Up to 2000 Splice Result Storage: Last 2000 records retained in internal memory Key Features 100 preset and user-programmable splicing modes Dual CMOS camera system with 4.1-

inch TFT color LCD (anti-reflective coating) Magnification: 300× (single X/Y view) or 187× (dual X/Y simultaneous view) Automatic image orientation based on monitor position Real-time arc calibration with calibration-free operation Built-in tube heater with 30 heating modes: 30 seconds (FP-03 sleeve), 35 seconds (FP3-40), 35–55 seconds (micro sleeves) Protection sleeves: 60 mm, 40 mm, and micro formats Power: 100–240 V AC or 10–15 V DC via AC adapter (ADC-13); 13.2 V DC via BTR-08 battery Battery performance: 150–160 splice/heat cycles per charge (BTR-08, Ni-MH, with power save enabled) USB 1.1 (Mini-B) for PC data and video transfer 6-pin Mini-DIN connector for HJS-02, HJS-03, or SH-8C power supplies Typical Applications FTTx deployments, passive optical networks (PON), and access network restoration requiring field-grade splicing speed and reliability. Compatibility & Integration Supports ITU-T fiber standards G.652, G.651, G.653, and G.655. USB connectivity enables data logging and system diagnostics on external computers.

Features & description

From manufacturer datasheet

Features

- Fixed V-groove cladding alignment
- Applicable fibers: SM (G.652), MM (G.651), DS (G.653), NZDS (G.655)
- Typical splice loss 0.05 dB SM / 0.02 dB MM / 0.08 dB DS/NZDS
- Typical splice time 11 s (SM)
- 4.1-inch TFT color LCD; dual CMOS cameras
- Dual-directional operation; detachable work table on case
- Built-in tube heater with 30 modes; typical 30 s FP-03
- About 150 splice/heat cycles with BTR-08
- Shock/dust/rain resistance class features
- USB 1.1 Mini-B for PC communication

FSM18S Characteristics / Specifications

PARAMETER	VALUE
Model	FSM-18S
Manufacturer	Fujikura / AFL
Instrument Type	Single-fiber cladding-alignment fusion splicer
Fiber Count	Single
Cladding Diameter	125 um
Coating Diameter	250 to 1000 um
Cleave Length	sheath clamp A – up to 250 um coating 8-16 mm (over 250 um: 16 mm); holders FH-60-250/900 at 10 mm cleave
Splicing Modes	total 100 modes
Typical Average Splice Loss	0.05 dB SM; 0.02 dB MM; 0.08 dB DS; 0.08 dB NZDS (cut-back, ITU-T)
Return Loss	greater than 60 dB
Splicing Time	typically 11 s with standard SM (G.652)
Tube Heater	built-in 30 modes; typically 30 s with FP-03
Protection Sleeves	60 mm, 40 mm, Fujikura FPS01 series
Splice Result Storage	last 2000 results
Tension Test	1.96 to 2.25 N
Operating	0-3660 m; 0-95% RH; -10 to 50 C; wind to 15 m/s
Dimensions	136 × 161 × 143 mm (excluding rubber foot)
Weight	2.1 kg with ADC-13; 2.5 kg with BTR-08
Magnification	300X singleXor Y; 187X simultaneousXandYElectrode Life: about 2000 arc discharges
Power	100-240 VAC or 10-15 V DC with ADC-13; 13.2 V DC with BTR-08 Standard Operating Conditions Clean V-grooves. Select correct sheath clamp or fiber holders for coating diameter. Observe wind cover and electrode intervals. Operational Notes
Applicable fibers	SM (G.652), MM (G.651), DS (G.653), NZDS (G.655)

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Model	FSM-18S
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Instrument Type	Single-fiber cladding-alignment fusion splicer
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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.

environmental resistance (shock, dust, rain class tests). Typical splice time is about 11 seconds for standard SM fiber. Optional FH-60-250 / FH-60-900 fiber holders or sheath clamps CLAMP-S60A/B/C support different coating diameters.

Applications
Field and premise single-fiber splicing of SM/MM/DS/NZDS; FTTH and access construction; portable cladding-alignment splicing where core alignment is not required.

- Key Features
- Fixed V-groove cladding alignment
 - Applicable fibers: SM (G.652), MM (G.651), DS (G.653), NZDS (G.655)
 - Typical splice loss 0.05 dB SM / 0.02 dB MM / 0.08 dB DS/NZDS
 - Typical splice time 11 s (SM)
 - 4.1-inch TFT color LCD; dual CMOS cameras
 - Dual-directional operation; detachable work table on case
 - Built-in tube heater with 30 modes; typical 30 s FP-03
 - About 150 splice/heat cycles with BTR-08
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Technical Specifications

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Splice Result Storage	last 2000 results
Tension Test	1.96 to 2.25 N
Operating	0-3660 m; 0-95% RH; -10 to 50 C; wind to 15 m/s

PARAMETER	VALUE
Dimensions	136 x 161 x 143 mm (excluding rubber foot)
Weight	2.1 kg with ADC-13; 2.5 kg with BTR-08
Magnification	300X single X or Y; 187X simultaneous X and Y
Electrode Life	about 2000 arc discharges
Power	100-240 VAC or 10-15 V DC with ADC-13; 13.2 V DC with BTR-08

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Standard Operating Conditions
Clean V-grooves. Select correct sheath clamp or fiber holders for coating diameter. Observe wind cover and electrode intervals.

Operational Notes

Same OEM identity applies to catalog titles "Fujikura FSM-18S Fusion Splicer" and "Fujikura FSM-18S SM MM Fiber Fusion Splicer." Confirm kit contents (cleaver, holders, battery) separately.

Available from Aumictech

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

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

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
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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.