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Data Sheet

August 2, 2026

FUJIKURA

Fujikura FSM-41S Fusion Splicer

The Fujikura FSM-41S is a compact, solid fusion splicer designed for reliable fiber splicing in various field environments. It features a user-friendly interface, automated splicing programs, and precise fiber alignment for consistent, low-loss splices. Ideal for telecom, datacom, and other fiber optic applications.



MODEL	CALIBRATION
Fujikura FSM-41S	Available on request
CONDITION	STATUS
Used	In stock
RFQ / SKU	LISTING
FSM-41S	https://aumictechlabs.com/products/fsm-41s-2/

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Fujikura FSM-41S is a single-fiber fusion splicer designed for field deployment across diverse fiber types and field conditions. It employs active V-groove alignment with dual cameras for precise fiber core imaging and positioning. Warm Splice Imaging (WSI) technology observes fiber cores during the heating cycle to deliver accurate splice loss estimation, while Active Fusion Control (AFC) technology reduces re-splices by optimizing splice loss even with suboptimal cleave angles. Technical Specifications Fiber Compatibility Single-mode fiber: ITU-T G.652, G.657 Multimode fiber: ITU-T G.651 Dispersion-shifted fiber: ITU-T G.653 Non-zero dispersion-shifted fiber: ITU-T G.655 Cladding diameter: Approx. 125 μ m Coating diameter: 250 μ m to 3 mm Cleave length: 5 to 16 mm Performance Metrics Splice loss (G.652): Avg. 0.03 dB Splice loss (G.651): Avg. 0.01 dB Splice loss (G.653): Avg. 0.05 dB Splice loss (G.655): Avg. 0.05 dB Splice loss (G.657): Avg. 0.03 dB Splicing time (SM FAST): Avg. 6 to 7 sec Splicing time (AUTO): Avg. 9 sec Shrink

time: Avg. 25 sec Heat time (60 mm sleeve): Avg. 25 to 27 sec Fiber tensile test force: Approx. 2.0 N Electrode life: Approx. 5,000 splices (tool-free replacement) Splice modes: 100 total modes Stored splice results: 10,000 records Protection Sleeves Type: Heat-shrinkable Maximum length: 66 mm Maximum diameter (pre-shrink): 6.0 mm Power System Battery: BTR-11A pack included, rated for 200 splice and heat cycles per charge AC adapter: BTR-17 and ADC-19A included Power cords: ACC-08 and ACC-09 included

Features & description

From manufacturer datasheet

Features

- Active cladding alignment; dual CMOS cameras
- Warm Splice Imaging (WSI) core-sensing loss estimate
- Bluetooth to CT50 for blade management
- Typical 6 s SM splice; about 25 s heat (FP-60)
- 5-inch color touchscreen TFT LCD
- About 100 splice modes; 30 heat modes
- About 10,000 splice result storage
- About 200 splice/heat cycles per battery
- Electrode life about 5000 splices
- Wind protection to 15 m/s
- Interchangeable sheath clamps or fiber holders

FSM41S Characteristics / Specifications

PARAMETER	VALUE
Model	FSM-41S / 41S
Manufacturer	Fujikura / AFL
Instrument Type	Active cladding-alignment fusion splicer
Applicable Fibers	SM (G.652 & G.657), MM (G.651), DS (G.653), NZDS (G.655)
Fiber Count	Single
Cladding Diameter	125 um
Coating Diameter	250 um up to 3 mm
Cleave Length	5-16 mm
Typical Average Splice Loss	0.03 dB SM; 0.01 dB MM; 0.05 dB DS; 0.05 dB NZDS; 0.03 dB G.657
Splicing Time	typically 6 s SM (FAST mode about 6-7 s)
Arc Calibration	automatic real-time; previous-splice AUTO; manual available
Splicing Modes	100
Storage	10,000 splice results; about 100 images
Display	5-inch TFT color LCD / touchscreen; X, Y, or both
Magnification	about 200X single; 132X dual
Viewing	2-axis CMOS
Operating	0-5000 m; -10 to 50 C; 0-95% RH non-dew
Proof Test	about 1.96-2.0 N
Tube Heater	30 modes; typically 25 s with FP-60 (60 mm); about 25-27 s 60 mm mode
Sleeves	60 mm, 40 mm, micro
Battery	typically 200 splice/heat with BTR-11 / BTR-11A
Electrode Life	about 5000 splices
Power	100-240 VAC adapter; about 14.8 V DC battery
Terminals	USB 2.0; Bluetooth 4.1 LE (cleaver)
Wind Protection	max 15 m/s

PARAMETER	VALUE
Dimensions	131 × 201 × 79 mm
Weight	about 1300 g with battery Standard Operating Conditions Pair with CT50 for Bluetooth blade management when available. Keep V-grooves clean. Use sheath clamps or holders per workflow. Replace electrodes near 5000 splices.

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	
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Operational Notes

FSM-41S is the AFL/Fujikura 41S cladding-alignment platform; 41S+ adds Active Fusion Control-confirm faceplate if AFC features are required.

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

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<https://aumictechlabs.com>

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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.