

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 2, 2026

FUJIKURA

Fujikura FSM-30S Arc Fusion Splicer

The Fujikura FSM-30S is an automatic core alignment fusion splicer engineered for single-mode, dispersion-shifted, and multimode optical fibers across telecommunications and field deployment. It employs Profile Alignment System (PAS) technology for direct core monitoring, delivering ultra-low splice loss with accurate loss estimation independent of fiber age or quality. The splicer automatically aligns fiber cores, inspects cleave geometry, and applies eccentricity correction to maintain precision in demanding environments. Mechanical proof test: 2 N (23 KPSI) standard; 4.6 N (50 KPSI) optional Attenuation Control Internal memory: 100 splice data sets; expandable via PCMCIA card (up to 224,000 results) Aumictech offers NIST-traceable calibration and repair for the Fujikura FSM-30S. Calibration covers arc calibration (arc power and duration), V-groove alignment verification, cleave ang



MODEL

Fujikura FSM-30S

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

FSM-30S

LISTING

<https://aumictechlabs.com/products/fsm-30s-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Fujikura FSM-30S is an automatic core alignment fusion splicer engineered for single-mode, dispersion-shifted, and multimode optical fibers across telecommunications and field deployment. It employs Profile Alignment System (PAS) technology for direct core monitoring, delivering ultra-low splice loss with accurate loss estimation independent of fiber age or quality. The splicer automatically aligns fiber cores, inspects cleave geometry, and applies eccentricity correction to

maintain precision in demanding environments. Technical Specifications Fiber Splicing Single-mode fiber (SM) at 1310 nm Dispersion-shifted fiber (DS) at 1550 nm Cutoff wavelength-shifted fiber (CS) at 1550 nm Multimode fiber (MM) Erbium-doped fiber (ED) Physical & Operating Range Coated fiber diameter: 250 to 900 μm Cleaved fiber length: 8 to 16 mm Operating temperature: -10°C to $+50^{\circ}\text{C}$ Humidity: 0 to 95% RH Altitude: Up to 3,500 meters Splice Performance Single-mode typical loss: 0.02 dB Multimode typical loss: 0.01 dB Dispersion-shifted fiber typical loss: 0.05 dB Return loss: ≥ 60 dB Mechanical proof test: 2 N (23 KPSI) standard; 4.6 N (50 KPSI) optional Attenuation Control Intentional splice loss range: 0.5 dB to 20 dB Stepped attenuation: 1 dB to 15 dB in 1 dB increments Key Features Automatic arc power adjustment with integrated analysis software Eccentricity correction function (ECF) for core/cladding misalignment Programmable tube heater with heating profile control Cleaved fiber end-angle alarm adjustable to 5° Dust detection function Internal memory: 100 splice data sets; expandable via PCMCIA card (up to 224,000 results) CCD camera with high-resolution viewing on X and Y axes 4" or 5" LCD monitor with direct sunlight visibility RS-232C interface Physical Specifications Dimensions: 21 cm W $\times$ 18.7 cm D $\times$ 17 cm H Typical Applications Telecommunications network deployment, field fiber termination, and optical system installation where low splice loss and environmental compensation are critical.

Features & description

From manufacturer datasheet

Features

- Profile Alignment System (PAS) core alignment
- Eccentricity Correction Function (ECF)
- Typical loss about 0.02 dB SM / 0.01 dB MM / 0.03-0.05 dB DS class
- Automatic atmosphere, temperature, and humidity compensation
- Automatic arc-power optimization
- CS fiber modes; Erbium-doped / MFD compensation
- Intentional attenuator splice modes
- Programmable built-in tube heater
- Built-in LCD monitor
- Menu-driven maintenance and options
- Related era: predecessor to later FSM-40S/50S/60S/70S core-alignment line

FSM30S Characteristics / Specifications

PARAMETER	VALUE
Model	FSM-30S
Manufacturer	Fujikura / AFL
Instrument Type	PAS core-alignment arc fusion splicer
Applicable Fibers	SM, MM, DS, CS (cutoff-shifted), NZ-DS, Erbium-doped (single fiber)
Fiber Count	Single
Cleave Length	typically 8-16 mm (dealer listings)
Coating	typically 250-900 um class
Typical Average Splice Loss	about 0.02 dB SM; 0.01 dB MM; about 0.03-0.05 dB DS/NZ-DS (sheet variants)
Return Loss	about 60 dB or greater
Attenuator Mode	intentional splice loss control (dealer listings cite about 0.5-20 dB class)
Display	built-in LCD (about 4-5 inch class)
Operating Temperature	-10 to 50 C
Interface	RS-232C (some listings)
Dimensions / Weight	dealer listings vary by kit (compact PAS chassis generation) Standard Operating Conditions Clean cameras and V-grooves. Allow compensation sensors to stabilize outdoors. Use matched cleaver. Replace electrodes per Fujikura intervals for this generation.
Related era	predecessor to later FSM-40S/50S/60S/70S core-alignment line
Humidity	compensation, automatic arc-power optimization, CS fiber modes, programmable tube heater, intentional attenuator splices, and mode-field-diameter compensation for Erbium-doped fiber. A built-in LCD monitor (about 4-5 inch class) supports field visibi

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	10 to 50 C
Operating Temperature	10 to 50 C
Interface	RS-232C (some listings)
Dimensions / Weight	dealer listings vary by kit (compact PAS chassis generation) Standard Operating Conditions Clean cameras and V-grooves. Allow compensation sensors to stabilize outdoors. Use matched cleaver. Replace electrodes per Fujikura intervals for this generation.

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-30S
Manufacturer	Fujikura / AFL
Instrument Type	PAS core-alignment arc fusion splicer
Applicable Fibers	SM, MM, DS, CS (cutoff-shifted), NZ-DS, Erbium-doped (single fiber)
Fiber Count	Single
Cleave Length	typically 8-16 mm (dealer listings)
Coating	typically 250-900 um class
Typical Average Splice Loss	about 0.02 dB SM; 0.01 dB MM; about 0.03-0.05 dB DS/NZ-DS (sheet variants)
Return Loss	about 60 dB or greater
Attenuator Mode	intentional splice loss control (dealer listings cite about 0.5-20 dB class)
Display	built-in LCD (about 4-5 inch class)
Operating Temperature	-10 to 50 C
Interface	RS-232C (some listings)
Dimensions / Weight	dealer listings vary by kit (compact PAS chassis generation)
Standard Operating Conditions	
Clean cameras and V-grooves. Allow compensation sensors to stabilize outdoors. Use matched cleaver. Replace electrodes per Fujikura intervals for this generation.	
Operational Notes	
Confirm FSM-30S (single PAS) vs FSM-30R / FSM-30R12 ribbon mass platforms. Do not invent unverified cycle counts without an OEM sheet for the exact revision.	

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 ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 2, 2026

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