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Data Sheet
August 13, 2026

FUJIKURA

Fujikura FSM40PM

The Fujikura FSM40PM is a fusion splicer designed for Polarization Maintaining (PM) fiber splicing. It offers precise alignment and splicing capabilities for specialized optical fibers used in high-performance applications. This model ensures low insertion loss and high return loss, crucial for maintaining signal integrity in PM fiber networks.

MODEL **Fujikura FSM40PM**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **FSM40PM**	LISTING **https://aumictechlabs.com/products/fsm40pm-2/**

NIST-traceable cal · SAM registered · 30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Fujikura FSM-40PM is a precision fusion splicer engineered for polarization-maintaining (PM) fiber splicing in demanding optical applications. Built around proprietary sweep arc technology, it delivers minimal splice loss through wide-area heating - especially critical when joining dissimilar fibers with large mode field diameter (MFD) mismatch. The movable V-groove and Z-mechanism enable short cleave length operation across multiple coating diameters while maintaining high tensile strength, making it ideal for compact field deployments and laboratory environments. Technical Specifications Applicable Fiber Types Single mode (SM), multimode (MM), dispersion-shifted (DS), non-zero dispersion-shifted (NZ-DSF), cut-off shifted (CS), erbium-doped (ED) Polarization-maintaining: PANDA, 3M Tiger™, Bowtie Cleave Length Bare fiber clamping: 8–10 mm Coating clamping: 3–5 mm Fiber diameter range: 100–1000 µm (standard: 250 µm, 400 µm) Splice Loss (Typical) SM (bare): 0.02 dB | SM (coating): 0.03 dB MM (either clamp): 0.01 dB DS fiber:

0.04–0.05 dB PANDA fiber: 0.06–0.07 dB Bowtie/3M Tiger™: 0.06 dB Splice Time SM/MM: ~25 seconds DS/NZ-DS: ~40 seconds PANDA (bare): ~50 seconds 3M Tiger™ (bare): ~100 seconds Optical Performance Return loss: > 60 dB Cross talk (PANDA, 0.6° angle): -40 dB Cross talk (3M Tiger™, 1.4° angle): -32 dB Mechanical Tensile strength (coating clamp): ~2.5 GPa at 30 N In-line proof tester load: ~2 N Working stage height: 88 mm Software & Integration 40 splice program modes with reference data RS232C interface for splice result download and parameter modification Power meter feedback capability Cross talk estimation via profile observation Protection Sleeves 60 mm, 40 mm, and micro sleeves supported Key Features Sweep arc technology minimizes splice loss across dissimilar fiber pairs and PM combinations Movable V-groove and Z-mechanism facilitate short cleave splicing with high tensile strength Fiber holder system reduces operator-dependent variation Low-profile desktop form factor (88 mm stage height) Cross talk estimation function for PM fiber diagnostics Typical Applications Optical amplifier assemblies, telecom backbone splicing, laboratory fusion work, EDFA module integration, and specialty fiber coupling where PM alignment and minimal loss are non-negotiable.

Features & description

From manufacturer datasheet

Features

• Automatic PM splicing modes for PANDA and Tiger • Typical PANDA splice loss 0.06 dB; crosstalk −40 dB class • Sweep arc for dissimilar fibers • High tensile ~2.5 GPa coating clamp; ~2 N proof test • 5" TFT LCD with multiple magnifications • AC 100–240 V via ADC-10

Applications

• PM fiber (PANDA / Tiger) factory splicing • High-strength specialty fiber device manufacture • Dissimilar fiber EDFA pigtails with sweep arc • Cross-talk-critical PM component assembly

FSM40PM Characteristics / Specifications

PARAMETER	VALUE
Model	FSM-40PM
Manufacturer	Fujikura
Instrument Type	Polarization Maintaining Fiber Fusion Splicer
Applicable Fibers	SM; MM; DS; NZ-DS; CS; ED; PANDA; Tiger; Bow-tie
Fiber Diameter	80–250 µm (standard 125 µm)
Coating Diameter	100–1000 µm
Fiber Cleaved Length Bare Clamp	8–10 mm
Fiber Cleaved Length Coating Clamp	3–5 mm
Typical Splice Loss SM Bare	0.02 dB
Typical Splice Loss MM	0.01 dB
Typical Splice Loss DS	0.04–0.05 dB
Typical Splice Loss PANDA	0.06–0.07 dB
Splicing Time SM/MM Typical	25 seconds
Splicing Time PANDA Bare Typical	50 seconds
Splicing Time Tiger Bare Typical	100 seconds
Return Loss	>60 dB
Cross Talk PANDA Typical	−40 dB (0.6°)
Cross Talk Tiger Typical	−32 dB (1.4°)
High Tensile Strength Typical	2.5 GPa (30 N)
Splice Result Storage	last 1,200 results
Display	5" TFT color LCD; 350×/270×/175×/135×; NTSC output
Power Supply	AC 100–240 V 50/60 Hz with ADC-10
Dimensions	311 × 218 × 133 mm
Weight	6.1 kg
Operating Temperature	0–40 °C; 0–95% RH

PARAMETER	VALUE
Altitude	0–3500 m Notes Specs from Fujikura FSM-40F & 40PM fusion splicer specifications. Confirm PM fiber holders/clamps with the unit.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	0–40 °C; 0–95% RH
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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.

Specifications

Specifications

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Cross Talk Tiger Typical	−32 dB (1.4°)
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In-line Proof Tester: approximately 2 N

Specifications

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Notes
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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

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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.