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Data Sheet

August 2, 2026

FUJIKURA

Fujikura 12S Single Fiber Fusion Splicer

The Fujikura 12S is a compact cladding-alignment single-fiber fusion splicer marketed as among the world's smallest and lightest Fujikura portable splicers. Dual-camera observation supports fiber alignment and loss estimation. Typical SM splice time is about 15 seconds; typical heat with FP-03 (60 mm) is about 30 seconds. Typical average splice loss is 0.05 dB SM (average SM about 0.018 dB on some sheets), 0.02 dB MM, and 0.08 dB NZDS/DS (cut-back). Battery capacity is typically about 100 splice/heat cycles with BTR-10; electrode life about 3000 splices. Shock, dust, and moisture protection and rugged transit case/workstation support field FTTx work. Compatible with FUSEConnect splice-on connectors. FTTx and premise single-fiber cladding-alignment splicing where extreme portability is required; drop and NID work; FUSEConnect installations. Power: 100-240 VAC with ADC-19; 14.8 V Li-ion BTR-10 (2000 mAh) Related Holders: FH-60-250, FH-60-900, FH-60-DC250, FH-FC-20/30, FH-LT900 Use matching fiber holders. Clean V-grooves. Charge BTR-10 per Fujikura guidance. Replace electrodes near 3000 splices. Cladding alignment—not PAS/core alignment. Confirm 12S vs later 22S/41S if active V-groove or WSI features are required.



MODEL

Fujikura 12S

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

12S

LISTING

<https://aumictechlabs.com/products/12s-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Fujikura 12S is a single-fiber fusion splicer engineered for field deployment across diverse fiber types and network environments. It delivers typical splice losses of 0.018 dB to 0.05 dB on

single-mode fiber and completes splicing in 15 seconds, with heating cycles in 30 seconds using standard protection sleeves. The unit combines dual-camera alignment with a 4.47-inch color LCD monitor at 100x magnification to ensure precise core positioning and loss estimation before and after the splice cycle. Technical Specifications Applicable Fibers: Single-mode (ITU-T G.652, G.657); multimode (ITU-T G.651); dispersion-shifted (ITU-T G.653); non-zero dispersion-shifted (ITU-T G.655) Fiber Count: Single fiber Cladding/Coating Diameter: 125 μ m cladding; 160 μ m to 3 mm coating Cleave Length: 5 mm to 13 mm Typical Splice Loss: SM 0.018–0.05 dB; MM 0.02 dB; DS 0.08 dB; NZDS 0.08 dB Return Loss: >60 dB Splice Time: 15 seconds (SM fiber, typical) Tube Heating Time: 30 seconds (FP-03, 60 mm sleeve, typical) Splice Storage: Last 2,000 splices Electrode Life: 3,000 to 5,000 splices Tension Test: 1.96–2.25 N Battery Performance (BTR-10): 100–200 splice and heat cycles per charge Key Features 2-axis CMOS camera system with 100x magnification for sub-micron alignment High-contrast 4.47-inch display readable in direct sunlight Extended-life electrodes minimize consumable replacement cycles Data logging for last 2,000 splice events Compact form factor: 121 mm W $\times$ 162 mm D $\times$ 57 mm H; 776 g with battery Fully ruggedized: 76 cm drop resistance, dust and rain rated (H=10 mm/hr for 10 min) Internet-enabled software updates Compatibility & Integration Fiber holders for 250 μ m, 900 μ m, 2 mm, and 3 mm diameters; FH-60-250 and FH-60-900 supported Protection sleeves: 60 mm, 40 mm, micro sleeves; FP-03 and FPS01 compatible FUSEConnect® fusion-installable connector ecosystem integration AC adapter (ADC-19): 100–240 VAC, 50–60 Hz input; 10–12 VDC output Optional BTR-10 rechargeable battery pack for field operation Transit case converts to functional work station

Features & description

From manufacturer datasheet

Features

- World's smallest/lightest class Fujikura portable splicer
- Cladding alignment; dual CMOS cameras
- Typical SM splice about 15 s; heat about 30 s (FP-03)
- Typical loss 0.05 dB SM / 0.02 dB MM / 0.08 dB NZDS/DS
- About 100 splice/heat cycles (BTR-10); about 3000 electrode life
- About 11 cm color LCD; 100X magnification
- Weight about 776 g with battery
- USB 2.0 mini-B; fiber holders for 250/900 μ m and drop cable
- FUSEConnect compatible

12S Characteristics / Specifications

PARAMETER	VALUE
Model	12S / FSM-12S
Manufacturer	Fujikura / AFL
Instrument Type	Cladding-alignment fusion splicer
Applicable Fibers	SM (G.652 & G.657), MM (G.651), NZDS (G.655), DS (G.653)
Fiber Count	Single
Cladding / Sheath	125 um / 160 um to 3 mm using fiber holders
Cleave Length	5-13 mm (5 mm requires CT30 class cleaver)
Typical Average Splice Loss	0.05 dB SM (avg SM about 0.018 dB); 0.02 dB MM; 0.08 dB NZDS; 0.08 dB DS
Return Loss	greater than 60 dB
Splicing / Heating Modes	100 splice / 30 heat
Storage	last 2000 results
Display	X/Y; 2-axis CMOS; about 11 cm color LCD; 100X
Operating	0-3660 m; -10 to 50 C; 0-95% RH non-dew
Wind Protection	up to 15 m/s
Proof Test	1.96-2.25 N
Tube Heater	built-in; sleeves 60 mm and 40 mm
Electrode Life	3000 splices
Battery Cycles	typically 100 with BTR-10
Power	100-240 VAC with ADC-19; 14.8 V Li-ion BTR-10 (2000 mAh)
Terminals	USB 2.0 mini-B
Dimensions	121 × 162 × 57 mm
Weight	776 g including battery
Related Holders	FH-60-250, FH-60-900, FH-60-DC250, FH-FC-20/30, FH-LT900 Standard Operating Conditions Use matching fiber holders. Clean V-grooves. Charge BTR-10 per Fujikura guidance. Replace electrodes near 3000 splices. Operational Notes

PARAMETER	VALUE
Cladding alignment	not PAS/core alignment. Confirm 12S vs later 22S/41S if active V-groove or WSI features are required.

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

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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

Aumictech

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NIST-traceable calibration · SAM registered ·
30-day returns
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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.