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Data Sheet
August 13, 2026

FUJIKURA

Fujikura 50R SM MM Fiber Ribbon Fusion Splicer

Fujikura 50R / FSM-50R Ribbon Fiber Mass Fusion Splicer The Fujikura FSM-50R (listed as 50R) isamass fusion splicer for ribbon fiber up to 12 fibers (FSM-50R12) or 8 fibers (FSM-50R8), also supporting single fiber. Fixed V-groove cladding alignment, dual CMOS cameras, automatic fiber loading, and arc calibration-free operation suit field ribbon splicing. The Fujikura FSM-50R (listed as 50R) isamass fusion splicer for ribbon fiber up to 12 fibers (FSM-50R12) or 8 fibers (FSM-50R8), also supporting single fiber. Fixed V-groove cladding alignment, dual CMOS cameras, automatic fiber loading, and arc calibration-free operation suit field ribbon splicing.

MODEL **Fujikura 50R**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **50R**	LISTING **https://aumictechlabs.com/products/50r-2/**

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

NAICS 423690 · 811210 · 541380

This unit

The Fujikura 50R SM MM Fiber Ribbon Fusion Splicer delivers precise, low-loss splicing of single-mode and multimode fiber ribbons in field and laboratory settings. Cladding alignment with fixed V-grooves ensures repeatable positioning. Two models accommodate 8-fiber (FSM-50R8) or 12-fiber (FSM-50R12) ribbon configurations. Dual CMOS cameras and a 5.6-inch color LCD monitor provide real-time fiber visualization at 49x magnification (FSM-50R8) or 35x (FSM-50R12). Automated fiber loading and arc calibration streamline workflow, while 40 user-programmable splicing modes and AUTO modes for common fiber types enable rapid setup. Technical Specifications Applicable Fibers Single-Mode (ITU-T G.652) Multimode (ITU-T G.651) Dispersion-

Shifted (ITU-T G.653) Non-Zero Dispersion-Shifted (ITU-T G.655) Performance Typical splice loss: 0.05 dB (SM), 0.02 dB (MM), 0.08 dB (DS/NZDS) Return loss: >>60 dB Splicing time: Typical 20 seconds Mechanical proof test: 2 N Cleaved fiber length: 10 mm Fiber Count & Storage FSM-50R12: Single, 2, 4, 5, 6, 8, 10, 12 fibers; last 400 results stored FSM-50R8: Single, 2, 4, 5, 6, 8 fibers; last 500 results stored Splicing Modes & Display 40 user-programmable modes; up to 60 reference modes AUTO modes for G.652, G.651, and other fiber types Splice loss estimate available X/Y or simultaneous dual-axis fiber viewing Built-in Tube Heater 10 heating modes; up to 20 reference modes Heating time: Typical 40–45 seconds (protection sleeves 40–60 mm) Applicable sleeve lengths: 40 mm, 60 mm Key Features Automatic arc calibration; manual calibration available Automatic fiber loading system Wide operating range: -10 to 50°C, 0 to 95% RH, 0 to 3,660 m altitude Dual power options: 100–240 V AC or 10–15 V DC (with ADC-11); 13.2 V DC (with BTR-06 battery packs) Detachable battery packs (BTR-06(S) and BTR-06(L)) Typical Applications Ribbon cable splicing in backbone and metro networks Field termination and laboratory testing Single-fiber and multi-fiber ribbon connections Compatibility & Integration Supports ITU-T G.652, G.651, G.653, and G.655 fiber standards. Splice loss measured per cut-back method relevant to ITU-T and IEC standards.

Features & description

From manufacturer datasheet

Features

• Mass fusion up to 12-fiber ribbon (R12) • Typical SM splice loss 0.05 dB; time ~20 s • Built-in tube heater; ~40–45 s heat • 5.6" color LCD; two CMOS cameras • Slot-in battery; wind to 15 m/s • USB and NTSC video terminals

Applications

• Ribbon cable mass fusion (2–12 fibers) • Single-fiber cladding-alignment splicing • Outside-plant ribbon restoration • Dual-directional operator setups

50R Characteristics / Specifications

PARAMETER	VALUE
Model	50R / FSM-50R12
Manufacturer	Fujikura
Instrument Type	Ribbon Mass Fusion Splicer
Applicable Fibers	SM G.652; MM G.651; DS G.653; NZDS G.655
Fiber Cleaved Length	10 mm
Typical Splice Loss SM	0.05 dB
Typical Splice Loss MM	0.02 dB
Typical Splice Loss DS/NZDS	0.08 dB
Splicing Time Typical	20 seconds
Return Loss	>>60 dB
Splicing Modes	40 user programmable plus up to 60 reference
Splice Result Storage	last 1,500 results internal memory
Display	Two CMOS cameras; 5.6-inch color LCD
Protection Sleeve Lengths	60 mm and 40 mm
Mechanical Proof Test	2 N
Operating Altitude	0–3660 m
Operating Temperature	−10 to 50 °C
Wind Protection	max 15 m/s
Power	100–240 Vac or 10–15 Vdc ADC-11; 13.2 Vdc BTR-06
Battery Cycles Typical	70 with BTR-06(S); 140 with BTR-06(L)
Dimensions	150 × 150 × 150 mm
Weight	2.2 kg (2.7 kg with ADC-11)
Terminals	USB 1.1; RCA NTSC video Notes Specs from Fujikura FSM-50R12 specification sheet. Confirm R8 vs R12 fiber-count capability on the unit labeled 50R.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	−10 to 50 °C
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Wind Protection	max 15 m/s
Power	100–240 Vac or 10–15 Vdc ADC-11; 13.2 Vdc BTR-06
Battery Cycles Typical	70 with BTR-06(S); 140 with BTR-06(L)
Dimensions	150 × 150 × 150 mm
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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

PARAMETER	VALUE
Model	50R / FSM-50R12
Manufacturer	Fujikura
Instrument Type	Ribbon Mass Fusion Splicer
Applicable Fibers	SM G.652; MM G.651; DS G.653; NZDS G.655

Fiber Count FSM-50R12: Single; 2; 4; 5; 6; 8; 10; 12

Specifications

PARAMETER	VALUE
Fiber Cleaved Length	10 mm
Typical Splice Loss SM	0.05 dB
Typical Splice Loss MM	0.02 dB
Typical Splice Loss DS/NZDS	0.08 dB
Splicing Time Typical	20 seconds
Return Loss	>>60 dB
Splicing Modes	40 user programmable plus up to 60 reference
Splice Result Storage	last 1,500 results internal memory

Magnification FSM-50R12: 35×
Display: Two CMOS cameras; 5.6-inch color LCD
Tube Heating Time FP-04(T) Typical: 40 seconds
Tube Heating Time FP-05 Typical: 45 seconds

Specifications

PARAMETER	VALUE
Protection Sleeve Lengths	60 mm and 40 mm
Mechanical Proof Test	2 N
Operating Altitude	0–3660 m
Operating Temperature	−10 to 50 °C
Wind Protection	max 15 m/s

PARAMETER	VALUE
Power	100–240 Vac or 10–15 Vdc ADC-11; 13.2 Vdc BTR-06
Battery Cycles Typical	70 with BTR-06(S); 140 with BTR-06(L)
Dimensions	150 × 150 × 150 mm
Weight	2.2 kg (2.7 kg with ADC-11)
Terminals	USB 1.1; RCA NTSC video

Notes
Specs from Fujikura FSM-50R12 specification sheet. Confirm R8 vs R12 fiber-count capability on the unit labeled 50R.

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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