

PM Fiber Arc Fusion Splicer FSM-45PM



The FSM-45PM is designed for splicing of polarization maintaining fibers.

The FSM-45PM has PAS (Profile Alignment System) technology for core-to-core fiber alignment, and theta alignment system for polarization maintaining fiber by rotating the fiber with theta motors.

In addition, some unique functions are available, which enable splicing of various fibers such as dissimilar fiber, large diameter fiber, attenuation splicing and short cleaved length splicing.

The fiber holder system, which is exclusively designed for FSM-45PM, provides easy handling of fiber during a series of splicing processes.

Features:

1. Core-to-core fiber alignment system with PAS technology.
2. Automatic theta alignment for polarization maintaining fibers.
3. V-groove Driving System for various kinds of splicing work.
4. Short cleaved length splicing capability.
5. Splice loss estimation function.
6. Cross talk estimation function for polarization maintaining fiber splicing.
7. Sweep arc function for various kinds of dissimilar fiber splicing.
8. Power monitor feedback alignment capability with GP-IB interface.
9. USB terminal and serial port for PC communication.
10. Universal Fiber Clamp for the fiber with the diameter of 80 μ m to 400 μ m

SPECIFICATIONS	
Applicable fibers	PM (PANDA, Bowtie, TIGER), SM, MM, NZDS, DS Large diameter fiber, Reduced cladding fiber
Fiber count	Single
Cladding diameter	80µm to 400µm
Coating diameter	100µm to 1,000µm
Fiber cleaved length	8mm to 10mm (standard) 3mm to 5mm (short cleaved length)
Actual average splice loss (with bare fiber clamping)	0.06dB with PANDA, 0.06dB with TIGER, 0.06dB with Bowtie at wavelength of 1310nm 0.02dB with SM, 0.01dB with MM, 0.04dB with DS
Average cross talk	-40dB with PANDA, -32dB with TIGER, -29dB with Bowtie
Splice time	45sec with PANDA, 90sec with TIGER, 110sec with Bowtie, 20sec with SM, 40sec with DS
Return loss	>>60dB
Splicing modes	40 user programmable modes and 120 database area (factory predetermined setting)
Splice loss estimate	Available
Attenuation splice function	0.1dB to 25dB
Storage of splice result	The last 1,200 splices to be stored in the internal memory
Fiber display	X/Y, or X and Y simultaneously
Magnification	270x for single X or Y view, or 135x for X and Y view
Viewing method	Two CCD cameras and 5 inch TFT color LCD monitor
Operating condition	0 to 3,500m above sea level 0 to 95%RH and 0 to 40 degree C respectively
Mechanical proof test	2.45N
Tube heater	Built-in tube heater with 10 heating modes and 20 database area
Tube heat time	Typical 100sec with FP-03 protection sleeve Typical 70sec with series of micro sleeves
Applicable protection sleeve length	60mm, 40mm, and a series of micro sleeves
Power supply	Auto voltage selection from 100 to 240Va.c. with ADC-10
Terminals	USB 1.1 (type B) and RS232C for PC communication GP-IB port for power monitor feedback alignment Video terminal RCA video jack / NTSC
Wind protection	Max. wind velocity of 5m/s.
Dimensions	311W x 218D x 234H (mm) in operation
Weight	6.1kg without AC adapter

STANDARD PACKAGE		OPTIONAL ITEMS		
Arc fusion splicer	FSM-45PM	Fiber holder	FH-40-xxx	FH-40-100,125,150,180,210,250 300,350,400,500,600,700 800,900
Fiber holder	FH-40-250 FH-40-400			
Fiber clamp	CLAMP-45-125 CLAMP-45-250 CLAMP-45-400 CLAMP-45-80/400	Fiber clamp	FH-40-LT900	for loose tube fiber
AC adapter	ADC-10	Fiber cleaver	CLAMP-45-xxx	CLAMP-45-080,100,125,150,180 250,400,500,600,900
AC power cord	ACC-08~12			
Carrying case with Z unit fixture	CC-05-45PM ZFIX-01	Fiber cleaver	CT-32	for 125µm cladding fiber
Spare electrode	ELCT1-25		CT-38	for 80µm cladding fiber
Hexagonal wrench	HEX-01	Cleaver spacer	SPA-40-CT-040	for 9mm cleave length
Top plate rubber cap	CAP-01		SPA-40-CT-050	for 10mm cleave length
Transfer holder	-	Thermal jacket stripper	HJS-02	for 125µm cladding fiber
DC inlet cover	-		HJS-02-80	for 80µm cladding fiber
Instruction manual	-	Jacket stripper	JS-02-900	for 900µm jacketing
		Stripper spacer	SPA-40-HJS030	for short cleave length
		External controller	CO-01	

Note 1) Specifications and descriptions are subject to change without prior notice.
Note 2) The export of FSM-45PM is controlled under Foreign Exchange and Foreign Trade Law of Japan.
Therefore, your order shall be subject to the approval of the Japanese Government.

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