

Fixed V-groove fusion splicer TYPE-81M12

**Compact,
Lightweight
&
Ultra fast**

**Simple
&
Versatile**

- Downsized by 43% from conventional model
- 2.0 kg weight with battery
- Ultra fast splicing 14 sec.
- Ultra fast heating 45 sec.

- IP52 rating and 76cm drop on 5 faces
- Automatic arc calibration

- Touch-screen operation
- Equipped with onboard user training video

- Upgrades software via internet
- Remote interactive maintenance via internet

**Durable
&
Rugged**

**Remote support
via
internet**

Ultra fast splicing in every environment

Specifications

Items		TYPE-81M12
Optical fiber requirements	Material	Silica glass
	Profile types	SMF (ITU-T G.652), MMF (ITU-T G.651), DSF (ITU-T G.653), NZDSF (ITU-T G.655), BIF (ITU-T G.657)
	Fiber counts	1, 2, 4, 5, 6, 8, 10, 12
	Fiber diameter/dimension	Ribbon: Cladding diameter: 125µm, Ribbon fiber thickness: 280~400µm Single: Cladding diameter: 125µm, Fiber coating diameter: 250µm, 500µm, 900µm
	Applicable cable size	Drop cable (2.0x3.1mm), Indoor cable (1.6x2.0mm)
Standard performance	Cleave length	10mm
	Splice loss (typical) ※1	SMF: 0.05dB, MMF: 0.02dB, DSF: 0.08dB, NZDSF: 0.08dB
	Splicing cycle time (typical)	9sec. (Single fiber), 12sec. (4-fiber), 14sec. (8-fiber, 12-fiber)
	Heating cycle time (typical)	45sec. (12-fiber)
	Splice & Heat cycles ※2	Approx. 160
Programs	Fiber view & magnification	Two CMOS cameras observation 23X (zoom: 46X) for X or Y single axis view, 23X for both X & Y dual axis view
	Splicing programs	Max. 200
	Heating programs	Max. 100
	Loss estimation	Provided
	Splice image capture / Splice data storage	64 images / 10,000 splice data
Functions	Proof test	1.96~2.09N (200~213gf)
	Reversible fiber holder system	Provided
	Dual automatic independent heaters	Provided (US patent 7,412,146)
	Automatic fiber count detection	Provided
	User-selectable heater clamp operation	Provided
	Onboard user training video	Provided
	Automatic arc calibration	Automatically compensates for environmental condition changes
	Arc test	Provided
	Display of remaining Splice & Heat cycles	Provided (Battery mode)
	Remote interactive maintenance	Provided
Size / Weight	Size	120Wx154Dx130H mm (without anti-shock rubber)
	Weight	1.7kg (without battery), 2.0kg (with battery)
	Monitor	4.1" touch screen color LCD display
Terminals	DC output	DC12 V (for JR-6)
	USB port	USB 2.0 (mini-B type)
	Storage media	SD/SDHC memory card
Power supply	AC input	100~240V, 50/60Hz (ADC-1430)
	DC input	10~15V
	Battery module	Li-ion 11.1V, 4,600 mAh (BU-11)
Operating condition	Altitude 0~3,660m, Temperature -10~+50°C, Humidity 0~95% (non-condensing), Wind velocity up to 15m/s	
Storage condition	Temperature -40~+80°C, Humidity 0~95% (non-condensing), Battery -20~+30°C (long term)	
Electrode life	1,500 arc discharges ※3	

※1: When the fibers under are identical to Sumitomo's fibers. ※2: Splice & Heat cycles may vary depending on the battery status and the operating environment.
※3: Electrode life may vary depending on the operating environment.

Environmental Durability ※

Test details	
Shock resistance	Drop from 76cm on 5 faces (excluding top face)
Water resistance	Equivalent to IPx2 (Operates normally after being exposed to water dripping at 3mm/min. for at least 2.5 min on each of 4 surfaces tilted at 15°)
Dust resistance	Equivalent to IP5x (Operates normally after 8 hours in a dust chamber containing dust of particle size 25µm or below)

※ Confirms the battery operation in tests carried out by Sumitomo.
Does not guarantee that the product is free of faults or damage.

Standard Package

Part name	Part No.	Qty.
Main unit	TYPE-81M12	1 pc
Battery module	BU-11	1 pc
Power supply module	ADC-1430	1 pc
Power cord	PC-AC<X>	1 pc
Cooling tray	-	1 pc
Spare electrode	ER-10	1 pair
Operating CD manual	-	1 pc
Quick reference guide	-	1 pc
Carrying case with worktable	CC-81	1 pc
Hand strap	-	1 pc
USB cable	-	1 pc

Optional Accessories

Part name	Part No.	Remarks
Car battery cable	PCV-11	for car battery operation (cigarette socket type)
Battery Charger	BC-11	
V-groove cleaning brush	VG-1	
Electrode	ER-10	
Fiber coating clamp unit	FCCU-11M	for φ0.25~φ0.9mm single fiber
Handheld fiber cleaver	FC-7R-F	Cleave length 10mm (ribbon), 6~20mm (φ0.25mm), 10~20mm (φ0.9mm)
Fiber cleaver	FC-6M	Cleave length 5~16mm (φ0.25mm), 10mm (φ0.9mm)
	FC-6RM	Automatic blade rotation function, Cleave length 5~16mm (φ0.25mm), 10mm (φ0.9mm)
Jacket remover	JR-M03	Jacket remover for single fiber
Hot jacket remover	JR-6	Hot jacket remover for ribbon fiber
Alcohol dispenser	HR-3	
Fiber protection sleeve	FPS-1	For single fiber, 60mm, sleeve diameter after shrink approx. φ3.2mm
	FPS-61-2.6	60mm, sleeve diameter after shrink approx. φ2.6mm
	FPS-S-40	40mm, sleeve diameter after shrink approx. φ2.2mm
	FPS-D60	for drop cable & indoor cable, 60mm, sleeve diameter after shrink approx. φ4.7mm
	FPS-5	for single fiber & up to 8-fiber ribbon, 40mm, sleeve diameter after shrink approx. φ4.2mm
	FPS-6	for single fiber & up to 12-fiber ribbon, 40mm, sleeve diameter after shrink approx. φ4.5mm

Optional Accessories (Fiber Holders)

Part No.	FHS-025	FHS-09	FHM-2	FHM-4	FHM-5	FHM-6	FHM-8	FHM-10	FHM-12	1SM-D	1SM-ST
Applicable Fiber or Cable	φ0.25mm single	φ0.9mm single	2-fiber ribbon	4-fiber ribbon	5-fiber ribbon	6-fiber ribbon	8-fiber ribbon	10-fiber ribbon	12-fiber ribbon	Drop cable	Indoor cable



Carrying case with worktable



Supports bi-directional splicing operation



Drop cable splicing with fiber holder system



Available for Lynx-Custom Fit™ Splice-On Connector



Hot jacket remover JR-6



Fiber cleaver FC-7 / FC-7R series



Fiber cleaver FC-6 / FC-6R series

The production process of this product meets ISO 9001. (JQA Certificate Number: JQA-1135)

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