

Direct Core Monitoring Fusion Splicer

TYPE-81C

**Compact,
Lightweight
&
Ultra fast**

**Simple
&
Versatile**

- Downsized by 43% from conventional model
- 2.1 kg weight with battery
- Ultra fast splicing (7 sec.)
- Ultra fast heating (28 sec.)
- G.657 fiber auto-splice function

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

- Touch-screen operation
- Universal clamps for 250µm, 900µm tight & loose buffer fiber (Patent Pending)
- User-selectable heater clamp operation (Patent Pending)
- Supports bi-directional splicing operation
Reversible coating clamps (Patent pending)
- 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-81C
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), EDF
	Fiber diameter	Cladding diameter: 80µm-150µm, Coating diameter: 100µm-1,000µm
	Applicable fiber or cable size	up to φ1,000µm
Standard performance	Cleave length	Drop cable (2.0x3.1mm), Indoor cable (2.0x2.0mm) 5-16mm
	Splice loss (typical) ※1	SMF: 0.02dB, MMF: 0.01dB, DSF: 0.04dB, NZDSF: 0.04dB
	Splicing cycle time (typical)	7sec. (Quick mode), 7.5sec. (SMF standard mode), 8sec. (Auto mode)
	Heating cycle time (typical)	28sec.
Programs	Splice & Heat cycles ※2	Approx. 200
	Fiber view & magnification	Two CMOS cameras observation, 320X (zoom: 700X) for X or Y single axis view, 88X for both X & Y dual axis view
	Splicing programs	Max. 300
	Heating programs	Max. 100
Functions	Loss estimation	Provided
	Splice image capture / Splice data storage	64 images / 10,000 splice data
	Proof test	1.96N (200gf)
	Attenuation splicing	0.1dB to 15dB in 0.1dB increments
	Universal clamps for 250µm, 900µm tight & loose buffer fiber	Provided
	Reversible coating clamps	Provided
	Dual automatic independent heaters	Provided (US patent 7,412,146)
	User-selectable heater clamp operation	Provided
	Onboard user training video	Provided
	Automatic arc calibration	Automatically compensates for environmental condition changes
	Arc test	Provided
Size / Weight	Size	120(W) x 154(D) x 130(H) mm (without anti-shock rubber)
	Weight	1.8kg (without battery), 2.1kg (with battery)
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)
	Battery module	10~15V Li-ion 11.1V, 4,600 mAh (BU-11)
Operating condition	Altitude 0~6,000m, 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	3,000 arc discharges ※3	

※1: When the fibers used 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-81C	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

Optional Accessories

	Part name	Part No.	Remarks
Optional accessories for main unit	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	
Other accessories	Fiber holder	FHS-025	for φ0.25mm single fiber
		FHS-09	for φ0.9mm single fiber
		1SM-D 1SM-ST	for drop cable (Cable size: typical 2.0 x 3.1mm) for indoor cable (Cable size: typical 2.0 x 2.0mm)
	Handheld fiber cleaver	FC-7R-S	Cleave length 6~20mm (φ0.25mm), 10~20mm (φ0.9mm)
		FC-7S	Cleave length 6~20mm (φ0.25mm), 10~20mm (φ0.9mm)
	Fiber cleaver	FC-6S-C	Cleave length 5~16mm (φ0.25mm), 10mm (φ0.9mm)
		FC-6S-5C	Cleave length 5~16mm (φ0.25mm & φ0.9mm)
		FC-6RS-C	Cleave length 5~16mm (φ0.25mm), 10mm (φ0.9mm)
		FC-6RS-5C	Cleave length 5~16mm (φ0.25mm & φ0.9mm)
	Jacket remover	JR-M03	Jacket remover for single fiber
Alcohol dispenser	HR-3		
Fiber protection sleeve	FPS-1	60mm, sleeve diameter after shrink approx.φ3.2mm	
	FPS-40	40mm, sleeve diameter after shrink approx.φ3.2mm	
	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-N4-X FPS-N9-X	Available for Sumitomo Nano sleeves for factory and optical component	



Carrying case with worktable



Supports bi-directional splicing operation



Drop cable splicing with fiber holder system



Available for Lynx-Custom Fit™ Splice-On Connector



Jacket remover JR-M03



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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