

# Direct Core Monitoring Fusion Splicer Z1C

**Compact,  
Lightweight  
&  
Ultra fast**

**Simple  
&  
Versatile**

- Downsized by 43% from conventional model
- 2.0 kg weight with battery
- Ultra fast splicing (7 sec.)
- Ultra fast heating (28 sec.)

- 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

**Durable  
&  
Rugged**

**Software upgrade  
via  
internet**

Ultra fast splicing in every environment

## Specifications

Items		Z1C
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)
	Fiber diameter	Cladding diameter: 80µm~150µm, Coating diameter: 100µm~1,000µm
	Applicable fiber or cable size	up to φ1,000µm
Standard performance	Cleave length	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. 100
	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	---
	Universal clamps for 250µm, 900µm tight & loose buffer fiber	Provided
	Reversible coating clamps	Provided
	Dual automatic independent heaters	---
	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	---
	Remote interactive maintenance	---
Size / Weight	Size	120(W) x 154(D) x 130(H) mm (without anti-shock rubber)
	Weight	1.8kg (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, 2,300 mAh (BU-11S)
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 75µm 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	Z1C	1 pc
Battery module	BU-11S	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	Available soon
	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	for drop cable (Cable size: typical 2.0 x 3.1mm)
		1SM-ST	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)
		FC-6S-C	Cleave length 5~16mm (φ0.25mm), 10mm (φ0.9mm)
		FC-6S-5C	Cleave length 5~16mm (φ0.25mm & φ0.9mm)
	Fiber cleaver	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
		HR-3	
	Alcohol dispenser	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
	Fiber protection sleeve	FPS-N4-X	Available for Sumitomo Nano sleeves for factory and optical component
		FPS-N9-X	



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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