

## Smart Active Clad Alignment fusion splicer

# Q502S

Powered by



**NanoTune™**  
Enhanced splice experience



**SumiCloud™**



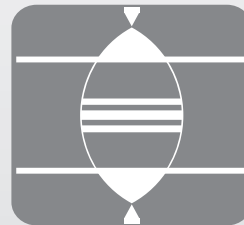
## Next generation splicing performance



Compact and light  
1.2 kg



Reduce work time  
Splicing 6s  
Heating 12s



Hot Core Analyzing



Splice Data  
Utilization

## Specifications

Items	Q502S	
Optical fiber requirements	Material	Silica glass
	Fiber count / Profile types	Single / SMF(G.652), MMF(G.651), DSF(G.653), NZDSF(G.655), BIF(G.657)
	Fiber diameter	Cladding diameter : 125 um, Coating diameter : 250um to 3mm (by multi clamp option)
Standard performance	Cleave length	5 to 16mm for single fiber, 8mm for drop cable
	Splice loss (typical)*2	SMF : 0.03dB, MMF : 0.01dB, DSF : 0.05dB, NZDSF : 0.05dB
	Return loss (typical)	60dB or greater
	Splice time (typical)	6sec (SM G652 Quick Mode)
	Heating time (typical)	12sec (FPS-61-2.6 sleeve, S60mm 0.25 Quick Mode)
	Splice & Heat cycles per battery full charge*3	Approx. 250 (BU-17)
	Fiber view & magnification	2 CMOS cameras observation, 180X (zoom : 370X) for X or Y single axis view
	Proof test	1.96 - 2.09N
Programs	Applicable protection sleeve	60mm, 40mm & Sumitomo Nano sleeves
	Splice programs	Max. 300, 18 are pre-optimised, 282 editable by user
Functions	Heating program	Max. 100, 27 are pre-optimised, 73 editable by user
	Splice image capture / Splice data storage	200 images / 10,000 splice data (internal memory only) 50,200 / 20,000 (With 16GB SD card)
	Multi clamp	Applicable for 250 & 900um coated fiber, 900um loose buffer fiber, 2 & 3mm jacket cord and rectangular drop cable
	Heater clamp for splice on connector	Provided
	Auto-start	Splice / Heating
	Automatic fiber identification	SMF / MMF
	Automatic arc calibration	Automatically compensates for environmental condition changes
	Core loss estimation	Provided, HCA: Hot Core Analyzing
Size / Weight	Wireless LAN connectivity (Option)*4	Provided
	Onboard user training video	Provided
Terminals	Size	126(W) x 154(D) x 101(H) mm (without protrusion)
	Weight	0.9kg (without Battery), 1.2kg (with Battery BU-17)
	Monitor	4.3 inch color LCD display with capacitive touch screen
Power supply	USB port	USB 2.0 (mini-B type)
	Storage media	SD / SDHC memory card Max32GB
Operation condition	AC input	AC 100 - 240V, 50 / 60Hz (ADC-15)
	DC input	DC 10 - 15V
	Battery pack	Li-ion 10.8V, 4,560mAh (BU-17)
Storage condition	Altitude : 0 - 5,000m, Temperature : -10 - +50°C, Humidity : 0 - 95%RH (non-condensing), Wind velocity : up to 15m/sec	
	Temperature : -40 - +80°C, Humidity : 0 - 95%RH (non-condensing), Battery : -20 - +30°C (long term)	
Electrode life *5	6,000 arc discharges	
Software updates	Internet	
Data management	Can be stored, edited and analyzed by dedicated PC software	

\*1,4 : SumiCloud availability / wireless LAN connectivity depends on region. More details: <https://global-sei.com/sumitomo-electric-splicers/products/sumicloud/>

\*2 : Average value of the final inspection in room temperature with Sumitomo identical fibre. Measured by cut-back method relevant to ITU-T and IEC standards.

\*4 : Splice & Heat cycles may vary depending on the battery status and the operating environment.

\*5 : Achieved in lab condition. Electrode life may vary depending on the operating environment.

## Environmental Durability\*

Test details	
Shock resistance	Drop from 76cm on 5 faces (excluding top face)
Rain resistance	Equivalent IPX2
Dust resistance	Equivalent IP5X

\*Splicer operation after shock, impact, water or dust tests, was confirmed under battery power, by Sumitomo.

Does not guarantee the product will not be damaged by these conditions.

## Standard Kit Contents

Part name	Part No.	Qty.	Part name	Part No.	Qty.
AC adapter	ADC-15	1pc	Carrying case	CC-17	1pc
AC power cord	PC-AC<* >2P	1pc	Working tray	WT-17	1pc
Battery pack	BU-17	1pc	Shoulder belt	—	1pc
Spare electrode	ER-17	1pair	USB cable	—	1pc
Quick reference guide	—	1pc			

\*X=2(USA), 3(EU), 4(JP), 5(UK), 6(AUS), 7(South Africa)

Items listed in Standard Kit Contents are always included with the splicer body. Overall kit content may vary regionally. Please check with your local authorised reseller to confirm kit content in your region.

## Optional Accessories

	Part name	Part No.	Remarks
Accessories for Splicer	SumiCloud card	WLS-0416	For SumiCloud™ connection
	Fiber holder	FHS-025-LB5-L	For 0.9mm loose buffered single fiber
	Transfer clamp	CLP-201	Transferring drop cable on working tray
	Battery pack	BU-17	Li-ion 10.8V, 4,560mAh
	Battery charger	BC-17	For BU-17
	Car battery cable	PC-V25	For car battery operation (cigarette socket type)
	Electrode	ER-17	—
Accessories	Cooling tray	FCT-17	—
	Fiber cleaver	FC-6S-C	Table-top high precision cleaver
		FC-6RS-C	Automatic blade rotation cleaver
	Hand held fiber cleaver	FC-8R	Automatic blade rotation cleaver with counter
	Jacket remover	JR-M03	Jacket remover for single fiber
	Cleaning kit	FUS-CLK-KIT	Fusion splicer cleaning kit & consumables
	Fiber protection sleeve	FPS-1	60mm, diameter after shrink approx. 3.2mm
FPS-40		40mm, diameter after shrink approx. 3.2mm	
FPS-61-2.6		61mm, diameter after shrink approx. 2.6mm	

## Ordering Information

Part Number	Description
TYPE-Q502S-KIT-1H	TYPE-Q502S Quantum Fusion Splicer Kit includes 250um and 900um Fiber Holders, Fiber Stripper (JR-M03), One Pack of Fiber Protection Sleeves, Hard Shipping Case, one set of Spare Electrodes (ER-17), AC Interface/Battery Charger with Power Cord, Battery Unit (BU-17), Cleaning Kit (FUS-CLN-KIT)
TYPE-Q502S-KIT-2H	TYPE-Q502S Quantum Fusion Splicer Kit includes Fiber Cleaver (FC-6S-C), 250um and 900um Fiber Holders, Fiber Stripper (JR-M03), One Pack of Fiber Protection Sleeves, Hard Shipping Case, one set of Spare Electrodes (ER-17), AC Interface/Battery Charger with Power Cord, Battery Unit (BU-17), Cleaning Kit (FUS-CLN-KIT)
TYPE-Q502S-KIT-6RSCH	TYPE-Q502S Quantum Fusion Splicer Kit includes 250um and 900um Fiber Holders, Precision Cleaver w/ Auto Rotating Blade (FC-6RS-C), Fiber Stripper (JR-M03), One Pack of Fiber Protection Sleeves, Hard Shipping Case, set of Spare Electrodes (ER-17), AC Interface/Battery Charger with Power Cord, Battery Unit (BU-17), Cleaning Kit (FUS-CLN-KIT)
TYPE-Q502S-KIT-8RH	TYPE-Q502S Quantum Fusion Splicer Kit includes 250um and 900um Fiber Holders, Precision Cleaver w/ Auto Rotating Blade (FC-8R), Fiber Stripper (JR-M03), One Pack of Fiber Protection Sleeves, Hard Shipping Case, set of Spare Electrodes (ER-17), AC Interface/Battery Charger with Power Cord, Battery Unit (BU-17), Cleaning Kit (FUS-CLN-KIT)

 Sumitomo Electric Industries, Ltd.

■ Specifications are subject to change without prior notice.

Designed in Japan  
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