



Active Clad Alignment fusion splicer

# T-402S

Powered by



**NanoTune™**  
Enhanced splice experience



**SumiCloud™**



## Small, yet smart and strong



Proven field  
toughness



High environmental  
resistance



Smart and easy



Compact and light  
1.2 kg

| Specifications             |                                                |                                                                                                                           |
|----------------------------|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Items                      |                                                | T-402S                                                                                                                    |
| 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 : 125µm, Coating diameter : 250 - 1,000µm                                                               |
|                            | Cleave length                                  | 5 to 16mm for single fiber                                                                                                |
| Standard performance       | Splice loss (typical)*1                        | 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** | Approx. 250 (BU-17)                                                                                                       |
|                            | Fiber view & magnification                     | 2 CMOS cameras observation, 140X (zoom 370X) for X and Y axis view.                                                       |
|                            | Proof test                                     | 1.96 - 2.09N                                                                                                              |
|                            | Applicable protection sleeve                   | 60mm, 40mm & Sumitomo Nano sleeves                                                                                        |
| Programs                   | Splice programs                                | Max. 300, 16 are pre-optimised, 284 editable by user                                                                      |
|                            | Heating programs                               | Max. 100, 27 are pre-optimised, 73 editable by user                                                                       |
|                            |                                                |                                                                                                                           |
| Functions                  | Splice image capture / Splice data storage     | 200 images / 10,000 splice data (internal memory only), 50,200 / 20,000 (With 16GB SD card)                               |
|                            | Auto-start                                     | Splice/Heating                                                                                                            |
|                            | Multi clamp                                    | Provided, 250µm, 900µm tight & loose buffer fiber, 2 & 3mm jacket cord and rectangular drop cable, 3.5mm round drop cable |
|                            | Heater clamp for splice on connector           | Provided                                                                                                                  |
|                            | Automatic arc calibration                      | Automatically compensates for environmental condition changes                                                             |
|                            | Wireless LAN connectivity (Option)**3          | Provided                                                                                                                  |
|                            | Onboard user training video                    | Provided                                                                                                                  |
| Size / Weight              | Size                                           | 126(W) x 154(D) x 83(H) mm (without protrusion)                                                                           |
|                            | Weight                                         | 0.9kg (without Battery), 1.2kg (with Battery BU-17)                                                                       |
|                            | Monitor                                        | 4.3" color LCD display                                                                                                    |
| Terminals                  | USB port                                       | USB 2.0 (mini-B type)                                                                                                     |
|                            | Storage media                                  | SD / SDHC memory card Max 32GB                                                                                            |
| Power supply               | AC input                                       | AC 100 - 240V, 50/60Hz (ADC-15)                                                                                           |
|                            | DC input                                       | DC 10 - 15V                                                                                                               |
|                            | Battery pack                                   | Li-ion 10.8V, 4,560mAh (BU-17)                                                                                            |
| Operating condition        |                                                | Altitude : 0 - 5,000m, Temperature : -10 ~ +50°C, Humidity : 0 - 95%RH (non-condensing), Wind velocity : up to 15m/sec    |
| Storage condition          |                                                | Temperature : -40 ~ +80°C, Humidity : 0 - 95%RH (non-condensing), Battery : -20 ~ +30°C (long term)                       |
| Electrode life **4         |                                                | 6,000 arc discharges                                                                                                      |
| Software updates           |                                                | Internet                                                                                                                  |
| Data management            |                                                | Can be stored, edited and analyzed by dedicated PC software                                                               |

\*1 : Average value of the final inspection in room temperature with Sumitomo identical fiber. Measured by cut-back method relevant to ITU-T and IEC standards.

\*2 : Splice & Heat cycles may vary depending on the battery status and the operating environment.

\*3 : SumiCloud availability / wireless LAN connectivity depends on region. More details: <https://global-sei.com/sumitomo-electric-splicers/products/sumicloud/>

\*4 : 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), 4 edges and corners (bottom face only) |
| Water resistance          | Equivalent to IPx2                                                                    |
| Dust resistance           | Equivalent to IP5x                                                                    |

\*Splicer operation after shock, water or dust tests, was confirmed under battery power, by Sumitomo.  
Does not guarantee the product will not be damaged by these conditions.

| Basic Accessories     |                           |      |
|-----------------------|---------------------------|------|
| Part name             | Part No.                  | Qty. |
| AC adapter            | ADC-15                    | 1 pc |
| AC power cord         | PC-AC<X>*-2P              | 1 pc |
| Battery pack          | BU-17                     | 1 pc |
| Quick reference guide | —                         | 1 pc |
| Carrying case         | CC-18                     | 1 pc |
| Working tray          | WT-18 with WSK-18 & TA-18 | 1 pc |

\*X=2(USA), 3(EU), 5(UK/HK), 6(AUS), 8(CHINA), 9(INDIA), 10(BRAZIL)

Items listed in the table are typical contents included with the splicer body. Overall kit content may vary regionally. Please check with your local authorized reseller to confirm kit content in your region.

| Accessories             |                         |                  |                                                   |
|-------------------------|-------------------------|------------------|---------------------------------------------------|
|                         | Part name               | Part No.         | Remarks                                           |
| Accessories for Splicer | SumiCloud card          | WLSD series      | For SumiCloud™ connection                         |
|                         | 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) |
|                         | V-groove cleaning brush | VGT-2            | Brush for cleaning V-groove                       |
|                         | Electrode               | ER-17            | —                                                 |
|                         | Working tray strap kit  | WSK-18           | Kit for hanging tray around neck                  |
|                         | Tripod adapter          | TA-18            | For tripod use                                    |
|                         | USB cable               | —                | —                                                 |
|                         | Shoulder belt           | —                | —                                                 |
| Accessories             | Fiber cleaver           | FC-6S+<br>FC-7LS | Table-top type<br>Handheld type                   |
|                         | Jacket remover          | JR-M03           | Jacket remover for single fiber                   |
|                         | Loose tube cutter       | LTC-01           | —                                                 |
|                         | Alcohol dispenser       | ASB-17           | —                                                 |
|                         | 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         |
|                         |                         | FPS-D60          | 60mm, For drop and indoor cables                  |



Carrying case  
CC-18



Working tray  
WT-18



Working tray strap kit  
WSK-18



Tripod adapter  
TA-18



Handheld fiber cleaver  
FC-7LS



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■ Specifications are subject to change without prior notice.

Designed in Japan  
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