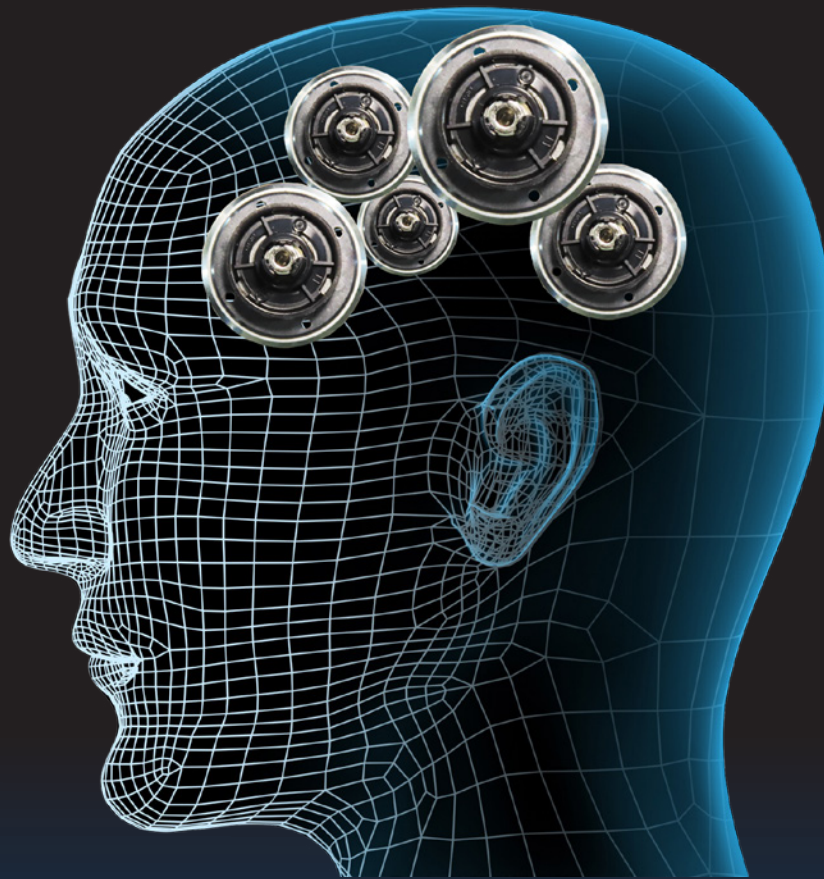


# Active **Blade** Management Technology

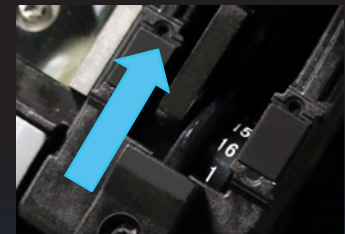
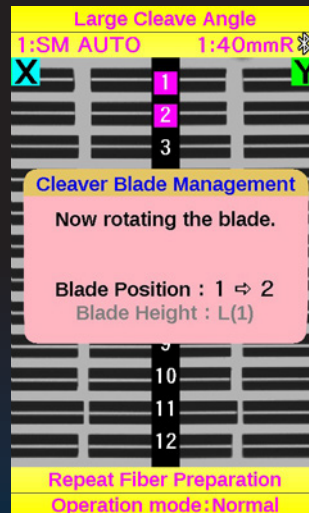
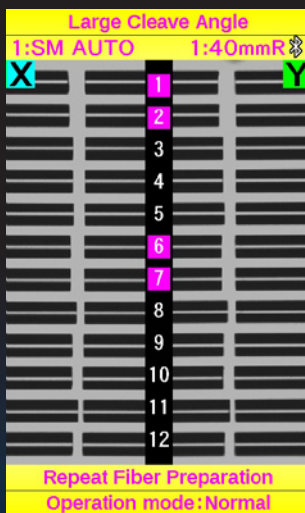


*Mass Fusion Splicer Kit*  
**70R+ and CT50**

# Active Blade Management Technology

## 1. Automatic Blade Rotation

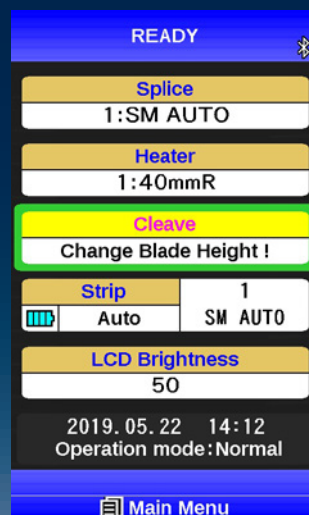
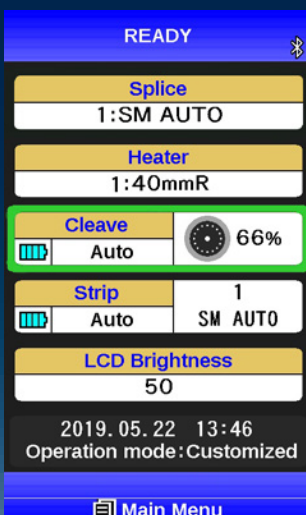
The 70R+ mass fusion splicer and CT50 fiber cleaver have wireless data connectivity. This capability allows automatic cleaver blade rotation when the splicer judges the blade is worn.



Motorized blade

## 2. Blade Life Management

The 70R+ mass fusion splicer indicates the remaining blade life and also informs the user when a blade height change is required.



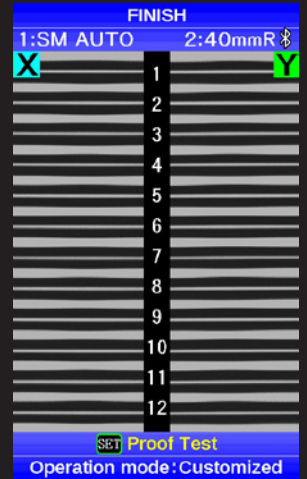
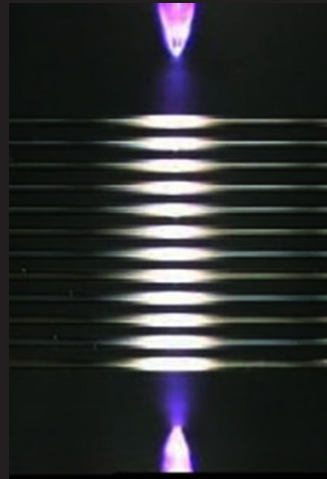
No.	Blade Height		
	L(1)	M(2)	H(3)
1	1014	0	0
2	1041	0	0
3	1175	0	0
4	1167	0	0
5	1060	0	0
6	1134	0	0
7	1530	0	0
8	1439	0	0
9	1185	0	0
10	1218	0	0
11	1025	0	0
12	1407	0	0
13	1338	0	0
14	1484	0	0
15	1259	0	0
16	1522	0	0

▲▼+ Blade Rotation  
 [Menu] Blade Height Change  
 ESC Exit

# Other Features

## 1. Mass Fusion Technology

The 70R+ mass fusion splicer has stable heating area for up to 12 fibers. The wide electrode gap melts the fibers uniformly with real time arc discharge control. The 70R+ doesn't have active core alignment mechanisms, however, during the discharge, fiber surface melting tension effects to minimize the fiber offset automatically. and splices not only conventional encapsulated ribbon, but also various ribbons including 200um coating Spider Web Ribbon.



## 2. Full Automatic Mechanism

The 70R+ mass fusion splicer has automatic open-close mechanisms of wind protectors and tube heater. It reduces operation procedures, and significantly improves work efficiency.



## 3. Easy Maintenance

The CT50 fiber cleaver has a user replaceable blade and rubber clamps - there's no need to send the device to a service center for blade or clamp replacement.



User replaceable cleaver blade

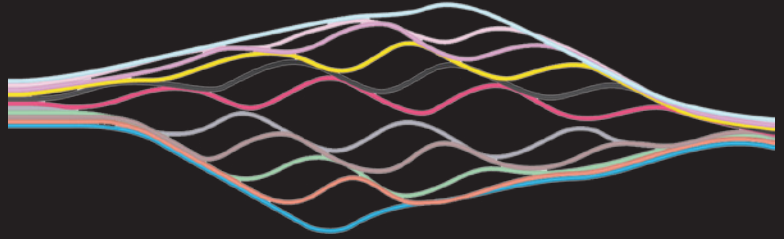


User replaceable rubber clamps

# Other Features

## 4. Universal Fiber Holder

The FH-70-12 fiber holder is compatible with many types of 12 fiber ribbon, such as 0.3mm or 0.4mm thickness of encapsulated ribbon and 200 $\mu$ m or 250 $\mu$ m coating diameter of SWR: Spider Web Ribbon.



## 5. Universal Ribbon Stripper

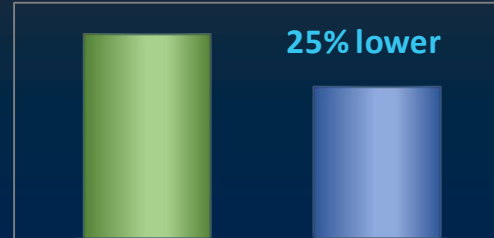
The Ribbon Stripper RS03 is also compatible with many types of ribbon without replacing the stripping blades.



## 6. Lower Stripping Force

The Ribbon Stripper RS03 has a new blade shape which realizes lower stripping force. Also, ergonomic clamp shape design requires lower gripping force.

12 Fiber Ribbon Stripping Force



Previous Model

New RS03

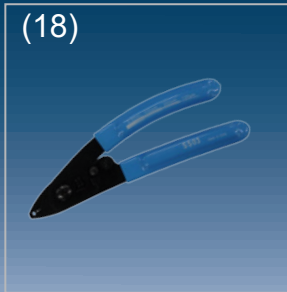
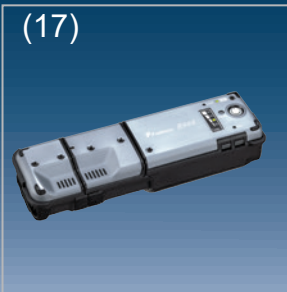
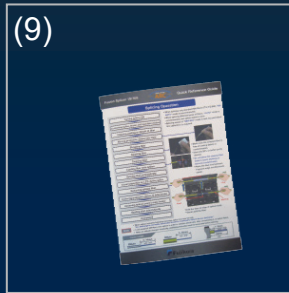
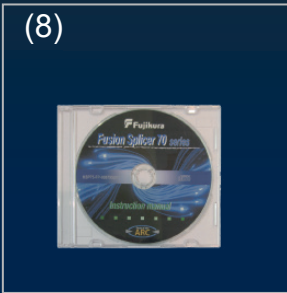
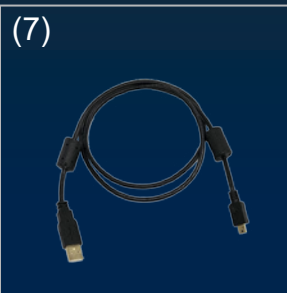
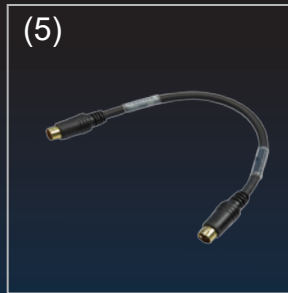
## 7. Stripping Condition Control

When the mass fusion splicer 70R+ changes the splice mode, e.g. from 12 fiber ribbon splice mode to single fiber splice mode, the ribbon stripper RS03 automatically changes heating temperature and time in accordance with a command from the splicer through wireless.



# Standard Package

Description	Model No.	Qty
(1) Fusion splicer	70R+	1pc
(2) Battery pack	BTR-09A	1pc
(3) AC adapter	ADC-18	1pc
(4) AC power cord	ACC-XX	1pc
(5) Battery charge cord	DCC-18	1pc
(6) Spare electrodes	ELCT2-20A	1pair
(7) USB cable	USB-01	1pc
(8) Instruction manual CD	M-70+	1pc
(9) Quick reference guide	Q-70R+/19R+(E)	1pc
(10) Sleeve loader	SL-01	1pc
(11) Alcohol pot	AP-01	1pc
(12) Carrying case	CC-30	1pc
(13) Work tray		1pc
(14) Strap		1pc
(15) Screw driver	SD-01	1pc
(16) V-groove cleaning brush	VCB-01	1pc
(17) Ribbon stripper	RS02/RS03	1pc
(18) Single fiber stripper	SS03	1pc
(19) Fiber cleaver	CT50	1pc
(20) Fiber plate	AD-10-M24	1pc
(21) Fiber cleaver carrying case	CC-37	1pc



# Specifications



## 70R+ Specifications

Item		Specifications
Fiber alignment method		Surface melting tension
Fiber count can be spliced		Up to 12 fiber ribbon
Applicable optical fiber	Fiber type	Single mode optical fiber Multi mode optical fiber
	Cladding dia.	Approx. 125um
Applicable coating	Fiber holder	Coating dia. : Refer to option
		Cleave length : 10mm
Fiber splice performance	Splice loss*1	ITU-T G.652 : Avg. 0.05dB
		ITU-T G.651 : Avg. 0.02dB
ITU-T G.653 : Avg. 0.08dB		
ITU-T G.655 : Avg. 0.08dB		
ITU-T G.657 : Avg. 0.05dB		
	Splicing time*2	SM FAST mode : Avg. 11sec.
		AUTO mode : Avg. 15sec.
Applicable protection sleeve	Sleeve type	Heat shrinkable sleeve
	Sleeve length	Max. 62mm
	Sleeve dia.	Max. 6mm before shrinking
Sleeve heat performance	Heat time*3	40mm 4 fiber ribbon: Avg. 18sec.
		40mm 12 fiber ribbon: Avg. 40sec.
		40mm single fiber: Avg. 17sec.
		60mm single fiber: Avg. 13sec.
Fiber tensile test force		Approx. 2.0N
Electrode life*4		Approx. 1,500 splices
Physical description	Dimensions W	Approx. 146mm without projection
	Dimensions D	Approx. 159mm without projection
	Dimensions H	Approx. 150mm without projection
	Weight	Approx. 2.5 kg including battery
Environmental condition	Temperature	Operate : -10 to 50 degreeC
		Storage : -40 to 80 degreeC
	Humidity	Operate : 0 to 95% non-condensing
Storage : 0 to 95% non-condensing		
Altitude	Max. 3,700m	
	AC adaptor	Input AC100 to 240V, 50/60Hz, Max. 1A
Battery pack	Type	Rechargeable Lithium Ion
	Output	Approx. DC14.4V, 3720mA
	Capacity *5	Approx. 110 splice and heat cycles
	Temperature	Recharge : 0 to 40 degreeC
		Storage : -20 to 30 degreeC
Battery life *6	200 to 500 recharge cycles	
Display	LCD monitor	TFT 4.73 inches
	Magnification	35x
Illumination	V-grooves	LED lamp
Interface	PC	USB2.0 MINI B type
	Ribbon	DC12V, Max. 1A
	Stripper	Mini DIN 6pin
	Wireless *7	Bluetooth® 4.1 LE
Data storage	Splice mode	100 splice modes
	Heat mode	30 heat modes
	Splice result	2,000 results
	Fiber image	100 images
Screw hole for tripod		M8mm, 1/4-20UNC
Other features	Automatic functions	Splice mode select by fiber count
		Fiber heat calibration
		Wind protector : open/close
		Heater lid : open/close
	Heater clamp : open/close	
Training	Pre-installed video	

## 70R+ Options

Item	Model Name	Remark
Fiber holder	FH-70-250	250um coating dia.
	FH-70-900	900um coating dia.
	FH-70-2	2 fiber ribbon
	FH-70-4	4 fiber ribbon
	FH-70-8	8 fiber ribbon
	FH-70-12	12 fiber ribbon
	FH-60-DC250	250um in drop wire cable
	FH-FC-20	900um in 2mm cable
	FH-FC-30	900um in 3mm cable
	FH-60-LT900	900um loose buffer cable
Battery pack*8	BTR-09A	Spare battery pack
Battery charge cord	DCC-18	ADC-18 to BTR-09A
DC power cord	DCC-12	From car cigar socket
	DCC-13	From car battery
Electrodes	ELCT2-20A	Spare electrodes
J-plate	JP-06	Sleeve place plate

### Notes

- \*1: Measured with a cut-back method relevant to ITU-T standard after splicing Fujikura identical fibers. The average splice loss changes depending on the environmental condition and fiber characteristics.
- \*2: Measured at the room temperature. The average splice time changes depending on the environmental condition, fiber type and fiber characteristics.
- \*3: Measured at the room temperature with the AC adapter. The average time changes depending on the environmental condition, sleeve type and battery pack condition.
- \*4: The electrode life changes depending on the environmental condition, fiber type and splice modes.
- \*5: The test condition was
  - (1) Splice and heat time : 2 minutes cycle
  - (2) Using the splicer power save settings
  - (3) Using a not degraded battery pack
  - (4) At the room temperature
 The number of cycles changes when the above conditions changes.
- \*6: The battery capacity decreases to a half after 200 to 500 recharge cycles. The battery life was shortened more by the out of storage temperature range, out of operating temperature range or complete discharge by storing a long time without recharge.
- \*7: Bluetooth® mark and logos are the registered trademarks of Bluetooth SIG, Inc.
- \*8: Please be ware the IATA regulation in case of shipping by air.

## SS01/03 specifications



Item	SS01	SS03
1) Stripping coating dia. Fiber dia. after stripping	250um	250um
	125um cladding	125um cladding
2) Stripping coating dia. Fiber dia. after stripping	None	900um
	None	250um coating
3) Stripping coating dia. Fiber dia. after stripping	None	2000 to 3000um
	None	900um coating
Dimension	Approx. 164 x 45 x 5mm	
Weight	Approx. 100g	

## Fiber protection sleeve specifications



Item	FP-03/FPS series	FP-04/05 series
Outer tube material	Polyethylene	
Inner tube material	Ethylene-Vinyl Acetate	
Strength member	Stainless	Quartz glass
Heat shrink operation	Temperature: -10 to 50 degreeC	
	Humidity: 0 to 95% non-condensing	
Storage	Temperature: -40 to 60 degreeC	
	Humidity: 0 to 95% non-condensing	

# Specifications

## CT50 Specifications



Item		Specifications
Applicable fiber	Fiber type	Single mode optical fiber
		Multi mode optical fiber
	Fiber count	Up to 12 fibers
	Cladding dia.	Approx. 125um
	Coating dia.	160 to 900um
Cleave length	Fiber plate	AD-10-M24: 5 to 24mm AD-50: 10 to 20mm
	Fiber holder	Approx. 10mm
Cleave angle	Single fiber *1	Avg. 0.3 to 0.9 degrees
	Fiber ribbon *1	Avg. 0.3 to 1.2 degrees
Blade life *2		Approx. 60,000 fibers
Physical description	Dimension	Approx. W120 x D95 x H58mm when closing the lever
	Weight	Approx. 305g including battery and AD-10-M24
Environmental condition	Temperature	Operate : -10 to 50 degreeC Storage : -40 to 80 degreeC
	Humidity	Operate : 0 to 95% non-condensing Storage : 0 to 95% non-condensing
Battery		2 pieces of LR03/AAA dry battery
Wireless interface *3		Bluetooth® 4.1 LE
Screw hole for tripod		1/4-20UNC
Other features	Blade rotation	Motorized rotation
		Manual rotation dial
	Consumable items	User blade replacement User clamp and anvil replacement

## CT50 Options

Item	Model Name	Remark
Blade	CB-08	Spare blade
Clamp and Anvil	ARM-CT50-01	Spare clamp and anvil
Dust box	FDB-05	Spare dust box
Side cover	SC-CT50-01	
Fiber plate	AD-10-M24	Coating 160 to 900um
	AD-50	Coating 160 to 3000um
Fiber holder	FH-50 series	
	FH-60 series	
	FH-70 series	

### Notes

\*1: Measured with an interferometer at the room temperature, not with the splicer. And, a new blade was used to cleave both the single fiber and 12 fiber ribbon. The average cleave angle changes depending on the environmental condition, blade condition, operating method and cleanness.

\*2: The blade life changes depending on the environmental condition, operating method and the fiber type to be cleaved.

\*3: Bluetooth® word mark and logos are the registered trademarks of Bluetooth SIG, Inc.

## RS02/03 Specifications



Item		Specifications
Applicable fiber	Fiber type	Single mode optical fiber
		Multi mode optical fiber
	Fiber count	Up to 12 fibers
	Cladding dia.	Approx. 125um
	Coating dia.	200 to 400um
Heat time*4	Stripping length	Up to 35mm
		Approx. 3sec Approx. 5sec with Eco-mode
Heat temperature		85 to 140 degreeC
Applicable fiber holder		FH-60, FH-70 series, FH-50 series Except for FH-50-250
Physical description	RS03 dimension	Approx. W156 x D49 x H37 mm without projection portion
	RS02 dimension	Approx. W156 x D49 x H33 mm without projection portion
	RS03 weight	Approx. 265 g including battery
	RS02 weight	Approx. 185g
Environmental condition	Temperature	Operate : -10 to 50 degreeC Storage : -40 to 80 degreeC
	Humidity	Operate : 0 to 95% non-condensing Storage : 0 to 95% non-condensing
AC adaptor	Input	AC100 to 240V, 50/60Hz, Max. 1A
	Output	DC12V, Max. 2A
DC power		DC10 to 17V, Max. 2A
Battery	Type	Rechargeable Lithium Ion
	Output	Approx. DC7.2V, 1840mAh
	Capacity *5	Approx. 600 times with Eco-mode
	Recharge	Approx. 2 hours from empty
	Temperature	Recharging : 0 to 40 degree C Storage : -20 to 30 degree C
Battery life *6		500 cycles
Wireless interface *7		Bluetooth® 4.1 LE
Other features	Strip operation	Low strip force with low grip force
	Strip condition	Controlled from splicer or smartphone

### Notes

\*4: Measured at the room temperature. The heat time changes depending on the environmental condition and fiber coating type.

\*5: Tested at the room temperature with a not degraded battery. The number of cycles changes depending on the environmental condition, stripper settings and battery degrading condition.

\*6: The battery capacity decreases to a half after approx. 500 recharge cycles. The battery life was shortened more by the out of storage temperature range, out of operating temperature range or complete discharge by storing a long time without recharge.

\*7: Bluetooth® mark and logos are the registered trademarks of Bluetooth SIG, Inc.



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