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# Sumitomo Electric Fusion Splicer T-55

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Automatic Adaptive Core Fusion Splicer

**T-55** 

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**Excellent Performance** 



**User Friendly** 



**High Environment Durability** 



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# Excellent Performance Splicing Speed

# Rapid sec. splice time "SM G652 Quick" Mode

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Comparison T-55 vs T-71C+

Model	Splice time		
T-55	7 sec		
T-71C+	6 sec		



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## Excellent Performance Heater Performance

# **20**sec. heating time



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#### Comparison T-55 vs T-71C+

Model	#of heater	Heating time	
T-55	Single	20 sec	
T-71C+	Dual	14 sec	



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# Excellent Performance Splicing Loss

# Splice Loss 0.02dB(Typical)

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Comparison T-55 vs T-71C+

Model	SMF G652D loss	G655 NZDSF loss
T-55	0.02dB	0.04dB
T-71C+	0.01dB	0.03dB



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# User Friendly Size/Weight

**Compact and lightweight** 



Note: The size above does not include rubber protection parts.



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## User Friendly Touch Panel

# **Touch optimised user interface for intuitive and easy operation**







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# User Friendly Splice & Heating Programme and Data Storage Select and customise



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# Durability Water Proof

# **High Environmental Durability**

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# **Passes IPx2 test**

# IPx2

Vertically dripping water shall have no harmful effect when the enclosure is tilted at an angle up to 15°from its normal position. Test duration: 10 min, Water equivalent to 3 mm rainfall per minute.



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# T-55 vs T-71C+ Comparison



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# T-55 vs T-71C+ Comparison



# T-71C+

- x8 microscopes
- High Definition Core Monitoring
- Most precise fibre alignment including core alignment on all commercially available G657 fibres
- Most accurate loss estimates, reducing rework and cost of cable installations



# T-55

- x4 microscopes
- Innovative Automatic Adaptive Core Alignment
- Splice loss performance broadly equivalent to other machines
- Loss estimate accuracy better than other machines



# **T-55 vs T-71C+ Comparison Overview**

		T-55	T-71C+	
Fibro typo	Common	SMF(G.652), MMF(G.651), DSF(G.653), NZDSF(G.655), BIF (G.657)		
Fibre type	Specialty	—	EDF etc	
Splice loss (typ.)		SMF : 0.02 dB MMF : 0.01 dB DSF/NZDSF : 0.04 dB	SMF : 0.01 dB MMF : 0.01 dB DSF/NZDSF : 0.03 dB	
Splice time (typ.)		7 sec.(SM Quick Mode) 9 sec.(Auto Mode)	6 sec.(SM Quick Mode) 8 sec.(Auto Mode)	
Heating time (typ.)		20 sec.	14 sec.	
Dual independent heaters		Not Available (Single)	Available	
Splice & Heat cycles per battery		Approx. 230 (BU-11)	Approx. 230 (BU-11)	
Automatic fibre identification		SMF / MMF / Other	SMF / MMF / DSF & NZDSF / BIF / Other	
Fibre magnification		200X X and / or Y view 88X XY dual view (Digital Zoom : 525X)	320X X and / or Y view 88X XY dual view (Digital Zoom : 700X)	
Data storage		200 image captures / 10,000 splice data (+SD card slot)		
Wireless LAN c	eless LAN connectivity Not Available Available		Available	
Remote mainte	enance	Not Available Available		
Touch screen n	nonitor	4.1" touch screen LCD		
Environmental	durability	Shock : Drop from 76cm on 5 faces Water : IPx2 Dust : IP5x		
Carrying case		CC-Z1 CC-71+		



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## **Excellent Performance** T-55 vs T-71C+ Splice loss Comparison

Splice loss with High Quality Fibre (good core eccentricity)



#### T-55 splice loss mostly equivalent to T-71C+



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## Excellent Performance T-55 vs T-71C+ Splice loss Comparison



#### T-71C+ achieves better loss than T-55



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**T-55** 

Ave. **5.9**sec.

**4.9**sec.

T-71C+

Ave.

#### **Excellent Performance**

### T-55 vs T-71C+ Splice loss Comparison

Test condition -Fibre : SMF -Splice program : SM G652 Quick mode -Number of splices : 100



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# T-55 vs Cladding Aligner (Fujikura 225 & Inno View3)



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# **Comparison with "Active V-groove"**

T-55 can see the core, cladding aligner=22S and View3 cannot

		T-55	Fujikura 22S	INNO View3	
	Common	mmon SMF(G.652), MMF(G.651), DSF(G.653), NZDSF(G.655)			
Fibre type Sp	Specialty	BIF (G.657)	_		
Alignment method		Automatic Adaptive Core Alignment	Active V-groove (Cladding) Alignment		
Can see core image		Yes	No	No	
Splice loss (typ.)*		SMF : 0.02 dB MMF : 0.01 dB DSF/NZDSF : 0.04 dB	ESMF : 0.03 dB MMF : 0.01 dB DSF/NZDSF : 0.05 dB	SMF : 0.03 dB MMF : 0.02 dB DSF/NZDSF : 0.05 dB	
Splice time	(typ.)	7 sec.(SM Quick Mode) 9 sec.(Auto Mode)	9 sec. (SM FAST) 11 sec. (SM AUTO)	7 sec.(Quick Mode) 9 sec.(SM Mode)	
Fibre identif	fication	Available (SM / MM / Other) Internally=Not displayed	Not Available	Not Available	
Heating time	e (typ.)	20 sec.	30 sec.	30 sec.	
Splice & Hea per battery	at cycles	115 (BU-11S) 230 (BU-11)	200 (BTR-11)	170 (LBT-40 4200mAh)	
Data storage		200 image captures (+50,000 with 8GB SD Card) 10,000 splice data (+10,000 with 8GB SD card)	8 image captures Last 10,000 splice data	0 image captures 2,000 splice data	
Touch scree	n monitor	Available 4.1" touch screen LCD	Not Available 4.73 LCD	Available 5.0" touch screen LCD	
Fibre magni	fication	200X X and/or Y view 88X XY dual view (Digital Zoom : 525X)	132X magnification 200X after splice	520X magnification	
Size and we	ight	120x154x130mm, 1.9kg	120x189x72mm, 1.14kg	177x147x149mm, 2.31kg	

\*) Actual splice Loss must be lower even if poor core concentration fibre. To be conducted benchmark test with 21S and View3



### **Splicing Loss Comparison**

As the T-55 can view and process the core image it consistently achieves lower splice loss than simple cladding alignment splicers. Ave. SUMITOMO 20 splice trial **0.01**dB 0.12 T-55 -55 0.1 SM-21S IEW3 0.08 Actual loss [dB] Ave. 0.06 Fujikura 0.02dB FSM-21S 0.04 0.02 0 Ave. Max. Ave. INNO **0.03**dB VIEW3 SM(G.652) T-55 0.0115 0.03 FSM-21S 0.06 0.0185 VIEW3 0.11 0.0305

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## Percentage of splice success with less than or equal to 0.02dB



#### Automatic adaptive core alignment beats simple cladding alignment



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# **Splicing Speed Comparison**

G.652 Quick Mode

Why use slow cladding alignment when T-55 uses faster Automatic Adaptive Core Alignment.



#### T-55, the fastest and with core image processing



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### **Accurate Loss Estimate Comparison**

Sumitomo Splicers guide you in RIGHT direction. Other Splicer brands guide you NOWHERE.

**Excellent Performance** 



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## **Excellent Performance** Accurate Loss Estimate Comparison

Thanks to its ability to process the core image, the Sumitomo T-55 beats the cladding aligners on loss estimate accuracy.



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## User Friendly Splicing / Heating Programme & Data Storage

Sumitomo T-55 provides the highest number of splicing programme, data & image.

