



FiberMASTER FUSION SPLICER

S40 DATASHEET

Specification

Fiber type supported		Single Mode (SM) and Multi-Mode (MM)
Fiber alignment method		Core adaptive cladding alignment
Number of motor used		4
Applicable fiber	Fiber count to be spliced	Single fiber
	Fiber profile types	G.651(MM), G.652(SM), G.653 (DS), G.654 (CSF), G.655(NZDS), G.657(BIF)
	Diameter of cladding	80 -150µm
	Diameter of coating	160-3000µm
	Fiber cleaved length	5-16mm (coating diameter < 250µm), 16mm (coating diameter:250-3000µm)
Fiber splice performance	Splice loss average*1	MM G.651: 0.01dB, SM G.652: 0.02dB, DS G.653: 0.04dB, CSF G.654: 0.04dB, NZDS G.655: 0.04dB, BIF G.657: 0.02dB
	Return loss average	> 60dB
	Fiber splice time*2	SM Auto mode: 7 seconds (average)
Splice protection sleeve	Sleeve type, length, diameter	Heat shrink sleeve, max length 62mm, diameter 6mm max before shrinking
	Heat time*3	60mm sleeve mode: 14-16 seconds (average) 40mm sleeve mode: 12 seconds (average)
	Heating profiles	Predefined: 5 (25,40, 45, 50,60mm sleeves), User: 35
	Heating mode	Auto/Manual/Pre heat
Fiber view & magnification		X or Y view 320 times, X and Y view 160 times
Functions	Fusion mode	Pre-defined: 50, user defined: 50
	Operation start mode	Automatic/Manual
	Image Sensor	Dual high sensitive CMOS
	Arc calibration	Manual, Auto
	Electrodes change	User field replaceable
	Fiber alignment Image light	Red LED (No mirror)
	Tension/Pull test (Auto)	1.8-2.2N, On/Off
	Universal splicing clamps	Standard, up to 250um, 900um tight buffer fiber, 2-3mm fiber cable
	Removable loose buffer clamps	Optional, 900um loose buffer fiber cable
	Splice loss estimation	On/Off
	Intelligent real time arc alibration	Auto mode only
	Splices & heat cycles*4	>250 (typical)
	Software upgrades	USB memory storage via USB 2.0 port
	Data management	Data file format: CSV; Image file format: bitmap managed by PC
	Electrodes life*5	Approx: 4000 splices
Splic data & image storage	8,000 sets splice data and 100 sets splice image	
Display		4.3" (480x272) colour LCD touch screen
User interface	Date format	DD-MM-YYYY, MM-DD-YYYY, YYYY-MM-DD, Time format: 24 hours
	Language supported	English, French, German, Spanish, Portuguese, Italian, Polish, Chinese
	Temperature unit	°C and °F

Battery pack	Type & output	Output: 10.8V 5200 mAh 56.16W rechargeable Li-ion battery in the unit
	Temperature	Recharge: 0 to +40°C, Storage: -10°C:+30°C
	Operation and standby time	Operation time: >5 hours (typical), standby time: 8 hours (typical)
	Charge time	3.0 hours (approx.)
AC power adapter		Input: AC 100-240V(50/60Hz), output: DC 11-13.5V
Environment condition	Operating conditions	Temperature: -10°C:+50°C, Altitude: 0-5000m, Humidity: 0-95% no condensation, Wind velocity: Max 15m/s
	Storage conditions	Temperature -20°C:+60°C, - 40°C:+80°C without battery
Data port		USB 2.0 for uploading splicer results and upgrading software via USB memory storage
Dimension (Approx.)		160mm(L) * 140mm(W) * 135mm(H) (including rubber armor)
Weight (Approx.)		1.97kg (including battery)
Environmental durability*6	Shock resistance	Drop from 76cm above concrete surface on 6 faces
	Impact resistance	Equivalent IK07 (EN/IEC 62202) on normal force impact
	Water resistance	Complying IPX2 with light rain protected (EN/IEC 60529)
	Dust resistance	Complying IP5X with dust protected (EN/IEC 60529)
Standard compliance	CE and UKCA Directive	2014/30/EU, SI 2016/1091 (The Electromagnetic Compatibility)
	Immunity and Emission (EMC & EMI)	BS/EN/IEC 661326-1:2021, BS/EN/IEC 61000-6-3:2007/A1:2011/AC:2012, BS/EN/IEC 61000-3-2:2019+A1:2021, BS/EN/IEC 61000-3-3:2013+A1:2019+A2:2021_AC:2022-01, BS/EN/IEC 61000-6-1:2019, BS/EN/IEC 61326-2:2021
	Safety	BS/EN/IEC 61010-1:2010+A1:2019
	RoHS directive	2011/65/EU: 2015/863, IEC 62321:2013

Note

*1 Measured with cut-back method relevant to ITU-T and IEC standard under Auto test mode.

*2 The splice time is counted from the fiber image appearing on monitor to the estimated loss displayed under the room temperature. The average splice time changes subjects to the environment conditions, fiber type and fiber characteristics.

*3 Measured at room temperature with pre-heat on. The heat time is defined start from beep sound to the stop beep sound of the heating. The average heat time changes subjects to the environment conditions, sleeve type and battery pack conditions.

*4 Measured at room temperature with a new fully charged battery and own brand 60mm heat shrink sleeve. Calculation is based on battery capacity. This may change due to the battery aging and different shrink sleeves used.

*5 Tested in the lab condition. electrode life may vary subject to the operation environment.

*6 Splicer operation as normal after shock, impact, water or dust tests under the battery powered. It does not guarantee the product will not be damaged under these test conditions.



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