

K33



Swift K33 is the highly advanced and accurate IPAAS Core-to-Core alignment fusion splicer for Medium and long ranged optical networks, CATV networks, and FTTX networks. With a compact, light, ruggedized design and long life-span battery, it could deliver high precision performance. Furthermore, 5-inch monitor with a touch screen may provide users with more convenient and efficient workability.

Features and Benefits

- Wide 5.0 inch color LCD monitor with Electrostatic touch screen
- Resistance to Shock, Dust & Water
- LED lamp installed on the wind cover for the light condition



Patented



Electrode Life

Up to **18,000** splices

Patented



Rotating Blade Life

77,000 fibers + **33,000** fibers
(Adjust the blade height up to 0.12mm), Total **110,000** fibers

Features

- Wide 5.0 inch color LCD monitor with Electrostatic touch screen
- User friendly GUI.
- Powerful lithium polymer battery with large capacity.
- Lowev Splice Loss.
- Resistance to Shock, Dust and Water
- LED lamp installed on the wind cover for low light condition.

Specifications

CATEGORY	DESCRIPTION
Fiber alignment	IPAAS Core Alignment
Applicable fibers	SM(G.652), MM(G.651), DS(G.653), NZDS(G.655), SM(G.657 A1, A2/B2, B3), SM(G.654 E)
Fiber count	Single fiber
Applicable fiber dimensions	Cladding diameter: 80~150µm, Coating diameter: 100µm ~3mm
Fiber cleave length	250µm: 5~16mm, 900µm;8~16mm
Splicing modes	Splice mode: 300, Heat mode: 100
Average splice Loss	SM: 0.02dB, MM: 0.01dB, DS: 0.04dB, NZDS: 0.04dB
Return loss	> 60dB (Typical)
Splicing time	Typical 6 sec. (Quick Mode)
Splice loss estimate	Available
Sleeve heating time	9 sec (IS-45 Sleeve, IS-45 mode), 13 sec (IS-60 Sleeve, IS-60 mode)
Applicable protection sleeve	32mm, 40mm, 60mm (Fiber) / 28mm or 32mm (Connector)
Storage of splice result	The last 10,000 results to be stored in the internal memory. (Image 10,000 results)
Tension test	1.96N ~ 2.25N
Operating conditions	Altitude: 0~5,000m above sea level, Temperature: -10°C ~50°C, Humidity: 0~95%, Wind: 15m/s, Non-condensing, Dust proof, Water proof, Shock proof
Storage conditions	Temperature: -40°C~80°C, Humidity: 0~95%
Dimensions	130(W) x 158(L) x 138(H)mm (Excluding rubber)
Weight	2.25kg (Including battery)
Viewing method and display	Two CMOS cameras and 5.0-inch color LCD monitor with Electrostatic touch screen
Fiber view and magnification	X/Y 200X, Max 670X
Power supply	100~240V
Battery life with heat-shrink	270 cycles with 4,700mAh & 350 cycles with 6,000mAh
Electrode life	Up to 18,000 splices
Terminals	USB, External power (DC 12V available for car cigar jack)

Standard Package

CATEGORY	MODEL	Q'ty
Arc Fusion Splicer	SWIFT K33	1
User guide	Download from UCLSwift Website	
Transporting Case	Hard Case	1
Battery	4,700mAh	1
AC Adapter	-	1
Cleaver	CS-01BT	1
Manual stripper	CF-02	1
Alcohol dispenser	PP	1
Tool box	-	1
USB Cable	-	1
Sleeve Loader	-	2

Optional Package

CATEGORY	MODEL
Battery	6,000mAh
Cleaver Blade	BI-07
Electrode	EI-23
External Power	DC 12V available for car cigar jack
Sleeve	S-160 (60mm), S-140 (40mm)
Sleeve Clamp	—
Optical Fiber Holder	HS-250, HS-900, HS-2.5F, HS-IN, HS-SC/FC, HS-ILC, HS-ST, LS-900(Loose tube)
SOC Connector	SC, LC, FC, ST (refer to FTTx solution catalogue)
Work Belt	—
Wi-Fi Card	—
Cleaver	CS-01BT

IP52 Test Report

for

Fusion Splicer

Arc Fusion Splicer Swift K33

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- a. The tests were conducted according to the internal judgment criteria.
- b. The contents described may not be copied, distributed, or used in whole or in part without prior permission.

1. General

This test report presents the test results for environmental testing (water resistance, dust resistance) of UCL Swift's core-aligned fiber fusion splicer.

2. Fusion Splicer

- Model Name : SWIFT K33
- External Size : 130 x 158 x 138 (mm)
- Weight : 2.25 kg (including battery)



Figure 1. Arc Fusion Splice SWIFT K33

3. Dust resistance (IP5x) test

3.1 Purpose

This ensures that the fusion splicer is protected from harsh dust environments and functions perfectly, ensuring quality.

3.2 Test method

3.2.1 Place the fusion splicer in a 1 cubic foot box.

3.2.2 Put about 6 teaspoons of silica powder with particles of 0.1~500 μm in size into a sealed box.

3.2.3 Circulate the silica powder inside the box by blowing air for about 12 minutes.

(Application of internal evaluation criteria in accordance with the test method of Telcordia TR-NWT-000264)

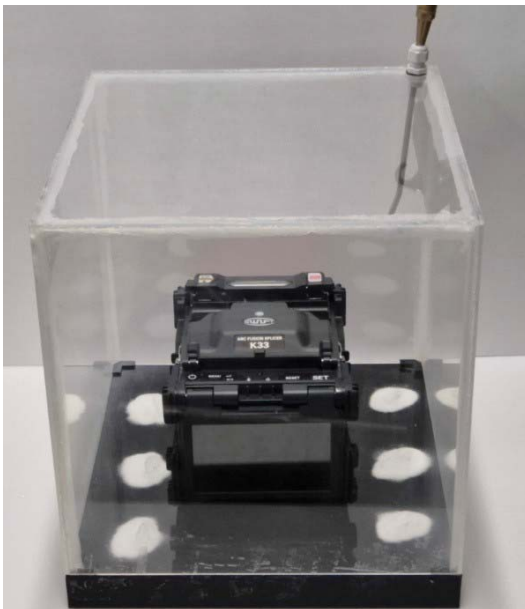


Figure 2.1. Perparing for dust test



Figure 2.2. After dust test

3.3 Test results

3.3.1 Wipe off the silica powder on the surface of the fusion splicer, ON/OFF, and check whether the buttons operating normally. : Pass

3.3.2 Check the normal operation status of each function such as fiber fusion splicing and sleeve heater. : Pass

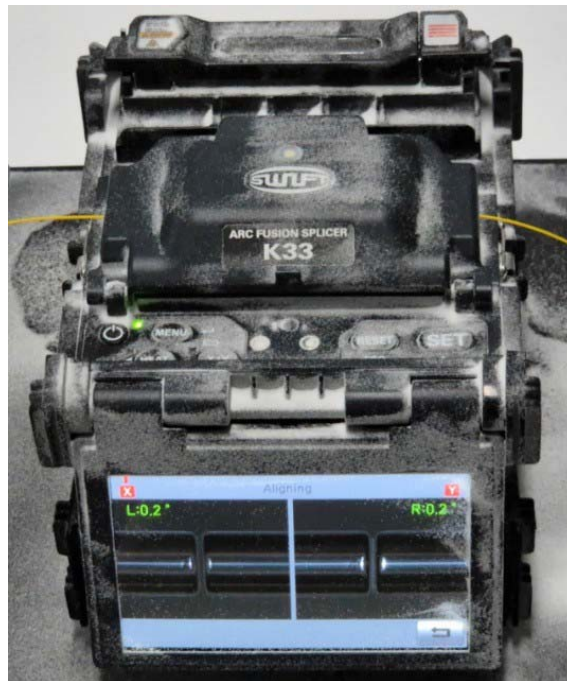


Figure 3. SWIFT K33 After dust blowing

4. Water resistance (Rain IPx2) test

4.1 Purpose

This is to protect the fusion splicers from rain and ensure quality so that it can operate without problems even under outdoor working conditions.

4.2 Test method

4.2.1 Install the artificial rain nozzle approximately 2.5 m above the test product.

4.2.2 Adjust the nozzle and flow meter so that 10 mm of artificial rain is sprayed per hour.

4.2.3 Spray through the nozzle on the fusion splicer for 10 minutes.

(Application of internal evaluation criteria according to IEC 60068-2-18 Ra.1)



Figure 4. Water resistance test artificial rain nozzle

4.3 Test results

- 4.3.1 After completely removing moisture from the outside of the fusion splicer to which artificial rain has been applied, turn the power ON/OFF to check the button operation status. : [Pass](#)
- 4.3.2 Check the normal operation status of each function such as optical fiber fusion splicing and sleeve heater, etc. : [Pass](#)



Figure 5. SWIFT K33 After Artificial Rain