

K33A-HDC Fusion Splicer

IPAAS Core Alignment



Product Description

UCL Swift's K33A-HDC is a compact, rugged fusion splicer designed to maximize efficiency and precision in the field. Its advanced ALLINONE system integrates five essential steps (stripping, cleaning, cleaving, splicing, and protecting) into a single streamlined process.

Equipped with a 5.0" color LCD touchscreen, K33A-HDC offers intuitive operation, while remote maintenance via internet ensures fast support and minimal downtime.

Fully compatible with UCL Swift's Fusion Splice-On Connectors (FSOC) and compliant with international standards, K33A-HDC delivers superior splicing performance for FTTx, enterprise, and harsh outdoor environments.

Optional Holders

580-900	5.4mm~5.8mm round drop cable holder with 900µm jacket holder
500-900	5.0mm round drop cable holder with 900µm jacket holder
ROC-900*	ROC drop dielectric cable, 5.4mm x 3mm cable, 900µm holder
SST-900L*	SST-drop outdoor dielectric cable holder, 8.1mm x 4.5mm cable, 900µm holder
SST-250L	SST-drop outdoor dielectric cable holder, 8.1mm x 4.5mm cable, 250µm holder
HS-IN	Drop dielectric cable holder, 5mm x 2mm cable, 250µm holder

* These items are included in the HDCFT Acc. Kit.

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Features and Benefits

- 1 The ALLINONE system combines five fiber processing steps into one unit, eliminating the need for separate tools and reducing installation time.
- 2 Thermal stripping minimizes physical damage to fibers and enhances tensile strength by up to 2kgf, contributing to long-term performance stability.
- 3 Ensures high compatibility with Fusion Splice-On Connectors built to international standards, supporting seamless integration in professional field applications.
- 4 Designed to withstand shock, dust, and water.

Patented



Electrode Life

Up to **18,000** splices.



Rotating Blade Life

77,000 fibers + **33,000** fibers.

Adjust the blade height up to 0.12mm,
Total **110,000** fibers.

Hardened Fusion SOC



The **HDCFT-KIT Accessory Kits*** includes all the tools necessary to prepare and terminate a UCL Swift HDCFT fusion splice-on connector onto both a flat 8.1mm X 4.5mm drop cable and a ROC® style drop cable. Optional holders are available for other cable types.

* Accessory kits required to install HDC Connector; Sold separately from splicer.

Performance Specifications

General	Fiber alignment IPAAS Core Alignment	Fiber count Single fiber
	Applicable fiber dimensions Cladding diameter: 80~150µm, Coating diameter: 100µm~3mm	Applicable type of 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 cleave length 250µm: 5mm to 16mm 900µm: 8mm to 16mm	Storage of splice result The last 10,000 results to be stored in the internal memory. (Image 10,000 results)
	Tension test 2N/4.4N (Option)	Applicable protection sleeve 40mm or 60mm (Fiber) / 28mm or 32mm (Connector)
Splicing Performance	Splicing time Typical 6 sec. (Quick mode)	Average splice loss SMF: 0.02dB, MMF: 0.01dB, DSF: 0.04dB, NZDSF: 0.04dB
	Return loss >60dB	Splicing modes Splice mode: 300, Heat mode: 100, Strip mode: 50
	Splice loss estimate Available	Sleeve heating time 9 sec. (IS-45 sleeve, IS-45 mode), 13 sec. (IS-60 sleeve, IS-60 mode)
Display & Viewing	Fiber view and magnification X/Y: 200X Max: 670X	Viewing method and display Two CMOS cameras and 5.0-inch color LCD monitor with Electrostatic touchscreen
	Power & Battery * Blade life may be changed under the condition of working environment.	Battery life with heat-shrink Typical 230 cycles (6,000mAh)
	Power supply 100~240V	Terminals USB, external power (DC 12V available for car cigar jack)
	Electrode life Up to 18,000 splices	Cleaver blade life* Max. 110,000 fibers
	Cleaver CF-07FT	
Environmental & Physical	Operating condition 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 condition Temperature: -40°C~80°C Humidity: 0~95%
		Dimensions and weight 136(W) × 215(L) × 137(H) mm (excluding rubber) 2.45 kg (including battery)

Standard Package

Category	Model	Q'ty
Arc Fusion Splicer	Swift K33A-HDC	1
Battery	6000mAh	1
Battery Adapter	AC Adapter	1
Spare Electrodes	EL-23	1 Pair
Transporting Case	-	1
Fiber Holder	HS-SC/FC	1
	HS-900, HS-250	1 Pair
Cooling Tray	CT-01	1
Sleeve Clamp	-	1
Sleeve Loader	-	1 Pair
USB Cable	-	1
Hard & Soft Brush	-	1
Allen Wrench	-	1
Tweezers	-	1

Optional Package

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