

# CT-110 and CT-111 Tension-Method Fiber Cleavers

The CT-110 tension-method cleaver and CT-111 tension-method cleaver with additional angled cleaving features are built to provide precision cleaves for a vast array of fiber types. These cleavers are heavily relied upon for fiber preparation of standard data communication fibers, polarization maintaining fibers, photonic crystal fibers, and even component manufacturing of ball lenses, end caps, and more. Leveraging the success of their predecessors, the CT-110 and CT-111 achieve industry leading performance in a small form factor, and with the option to operate cordless. With the industry leading blade life of both cleavers, blade position changes are infrequent, but when needed, the blade will index to the next position automatically driven by a motorized blade assembly. A record of the cleave count by blade position is displayed via the accompanying PC software for maximizing blade life.

As an industry first, these tension-method cleavers possess an RFID sensor which matches the RFID tag on the new FH-110 series fiber holders. The PC software for these cleavers has a new fiber holder management menu, where users can pair a fiber holder to a cleave mode. In this menu, each fiber holder's unique RFID and user defined name are used for assigning fiber holder and cleave mode combinations. The cleaver utilizes the assignments in this menu to automatically change the cleave mode based on the fiber holder recognized by the cleaver's RFID sensor. This can be used as either a process control measure, or to aid in cleave optimization. Cleave mode parameters can also be edited, uploaded, or downloaded to & from the cleaver via this software.

This category of tension-method cleavers brings exciting benefits to the specialty fiber optic industry. Fujikura continues to lead with innovation and value in the quality solutions they develop. Put our cleavers to the test by contacting us at 1-800-235-3423.

## Features

- RFID fiber holder identification and cleave mode selection
- Lightweight and cordless operation
- Motorized blade changes with no manual disassembly or adjustments
- Angled cleaves up to 15 degrees with CT-111
- Fine-tuned coating and total length adjustments post-cleave
- Tension digitally adjusted and automatically applied according to cleave mode
- PC Software for blade & fiber holder management downloaded from CT-110/111



CT-110 Blade



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# CT-110 and CT-111 Tension-Method Fiber Cleavers

## Specifications

Parameter		CT-110	CT-111
Applicable Fiber	Fiber Type	Silica Fiber	
	Fiber Count	Single Fiber	
	Cladding Diameter	80 to 250 µm	
	Coating Diameter	81 to 2,000 µm	
Applicable Fiber Holder	FH-100, FH-110, and optional FH-70 series <sup>1</sup>		
Tension range <sup>2</sup>	0 to 900 gf		
Total fiber length <sup>3</sup>	Approx. 11-44 mm		
Cleave angle <sup>4</sup>	Average 0.3° for 125 µm cladding diameter		
Angled cleaving	N/A		Approx 0° to 15°
Blade life <sup>5</sup>	Approx. 200,000 fiber cleaves for cladding diameter 250 µm		
Physical	Width	Approx. 140 mm without protrusions	
	Depth	Approx. 106 mm without protrusions	
	Height	Approx. 103.5 mm without protrusions	
	Weight	Approx. 810g without batteries	Approx. 850g without batteries
Environmental Conditions	Temperature	Operate: 0°C to 40°C	
		Storage: -40°C to 80°C	
	Humidity	Operate: 0 to 95% RH non-condensing	
		Storage: 0 to 95% RH non-condensing	
AC Adapter	Input	AC 100V to 240V, 50/60 Hz, Max. 1.5A	
	Output	Approx. DC 19V, Max 2.1A	
Battery	Type	X4 AA batteries (ANSI AA / IEC LR6)	
	Life	Approx. 250 fiber cleaves with standard 125 µm cladding dia. at 25°C	
Connection Terminals	PC	USB 2.0 Mini Type-B <sup>7</sup>	
	Ground	Applicable by M3 truss screw	
Wireless Communication	RFID	Compliant with ISO 15693 <sup>7</sup>	
PC Software	Firmware update via internet Cleave mode edit, upload, download and export		

### Notes:

1. Holder Adapter Plate (AD-CT110-FH70) is necessary to use FH-70 series holders.
2. There are some cases where the set tension is different than actual tension.
3. Total fiber length is the distance between cleaved fiber end-face and the nearest leading edge of the fiber holder.
4. Measured with an interferometer at room temperature, not with a splicer. The average cleave angle changes depending on the environmental conditions, blade condition, operating method, and cleanliness.
5. Maximum cleave angle changes depending on the fiber type and clamp position.
6. Supports 10,000 cleaves per position at cladding dia. 250 µm. 20 positions x 10,000 cleaves = 200,000 cleaves. The blade life changes depending on the environmental conditions, operating method, and the fiber type.
7. Unavailable with battery.

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# CT-110 and CT-111 Tension-Method Fiber Cleavers

## Ordering Information

Description	AFL No.
<b>CT-110 Tension-Method Fiber Cleaver</b> includes: ADC-21 AC Adapter, ACC—09 power cord, USB cable, two hex wrenches, instruction manual stored on cleaver, quick reference guide, and 1 year factory warranty.	S018320
<b>CT-111 Tension-Method Angled Fiber Cleaver</b> includes: ADC-21 AC Adapter, ACC—09 power cord, USB cable, two hex wrenches, instruction manual stored on cleaver, quick reference guide, and 1 year factory warranty.	S018321
CB-06A Replacement Blade	S016078
FH-70 series adapter plate (AD-CT110-FH70)	S018322
ADC-21 AC Adapter	S018168
ACC-09 Power Cord	S014390

## Fiber Holders

Description	AFL No.	Description	AFL No.
FH-110-60 Fiber Holder	S018215	FH-110-800 Fiber Holder	S018228
FH-110-100 Fiber Holder	S018216	FH-110-900 Fiber Holder	S018229
FH-110-125 Fiber Holder	S018217	FH-110-1000 Fiber Holder	S018230
FH-110-150 Fiber Holder	S018218	FH-110-1100 Fiber Holder	S018231
FH-110-180 Fiber Holder	S018219	FH-110-1200 Fiber Holder	S018232
FH-110-210 Fiber Holder	S018220	FH-110-1300 Fiber Holder	S018233
FH-110-250 Fiber Holder	S018221	FH-110-1400 Fiber Holder	S018234
FH-110-300 Fiber Holder	S018222	FH-110-1500 Fiber Holder	S018235
FH-110-350 Fiber Holder	S018223	FH-110-1600 Fiber Holder	S018236
FH-110-400 Fiber Holder	S018224	FH-110-1700 Fiber Holder	S018237
FH-110-500 Fiber Holder	S018225	FH-110-1800 Fiber Holder	S018238
FH-110-600 Fiber Holder	S018226	FH-110-1900 Fiber Holder	S018239
FH-110-700 Fiber Holder	S018227	FH-110-2000 Fiber Holder	S018240