

#### **Product Features**

- 420X image magnification
- 5-inch HD anti-reflective touch screen
- Support automatic detection of fiber optic cable type and automatic selection of appropriate welding mode
- The device has the ability to automatically diagnose the machine's condition before performing welding
- Voice broadcast function, operation real-time broadcast prompts, improve construction efficiency
- Industrial-grade processor, smooth system operation, simple interface, double touch operation
- Five-in-one multi-functional fixture, suitable for fusion splicing of various fiber types
- Modular design, Bluetooth, Wi-Fi, GPS/OTDR/VFL/OPM/LS/10G PON/laser ranging, Internet of Things and other functions can be expanded according to user needs. Through bluetooth, it can support splice data checking, device operation and anti-theft locking via Android mobile app.

**Details display** 



Intelligent Arc Control Technology



Ceramic Fiber Hammer Durable

Precision ceramic V-groove



Multifunctional integrated red light/optical power, etc.

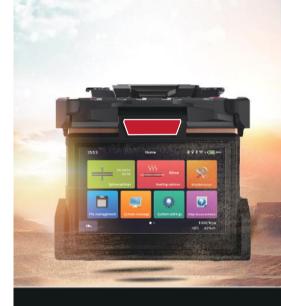
**Product appearance** 

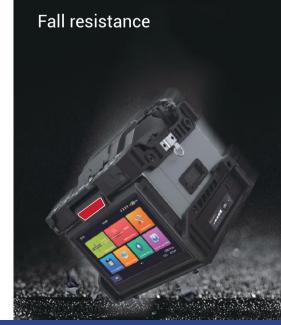


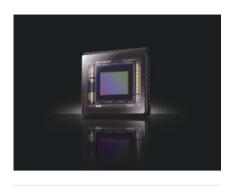




Dustproof(IP5x)

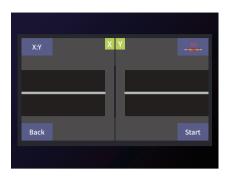






**HD Optical Image Acquisition System** 

HD Fiber Aligner High
Performance CMOS Sensor



# Lens Imaging Fiber Alignment System

Fast fiber end-face evaluation Precise fiber alignment



## Real-time arc correction system

High-performance discharge electrode current feedback and environmental compensation

### **Advanced product performance**

# Self-preheating of the heating furnace when starting up

Convenient in colder areas, and can still meet the heat shrinking requirements with quality and quantity

# Fully autonomous modular design

Reduce the cost of later maintenance accessories and labor costs

## High material used for movement frame

7075 aviation aluminum material with high precision, corrosion resistance and good hardness is used, which is stronger in service life and stability than ordinary injection molding process

## **Industrial-grade processo**

High environmental adaptability, good reliability, backlight buttons, USB lighting, no fear of darkness



#### Three-in-one fixture

Suitable for many different types: G.652、G.651,G.653、G.654、G.655、G.657

## **Core tuning structure**

Use the more expensive XY bidirectional moving precision rails

## **Built-in expansion platform**

Bluetooth, GPS, VFL, OPM, LS, OTDR, 10GPON, laser rangefinder, Internet of Things and other functions can be selected according to customer needs

## High job fault tolerance







Uneven end face of optical fiber

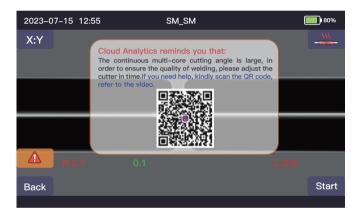
Fiber fragmentation

Fiber large cutting angle

PTV-14 welding machine uses a unique optical fiber image analysis algorithm, which can identify abnormalities such as uneven end face of optical fiber, fiber fragmentation, fiber objects and large cutting angle, intelligently change the welding parameters, minimize the impact caused by abnormalities, and the typical loss of optical fiber abnormalities can be controlled within 0.04dB, and the success rate of one-time welding can reach more than 98%.

### **Intelligent status tracking**





The system automatically tracks the user's usage, Intelligently analyzes the current status of the cutting cleanliness situation of the V-shaped and provides reminder to help users clean the V-shaped and adjust the cutting tool welding quality.

## **Environment adaptation**





PTV-14 welding machine is equipped with temperature, barometric pressure sensors, and intelligent environmental adaptation algorithms, which can operate normally in any environment without manual participation, and ensure that the welding effect and success rate are satisfactory, more intelligent and convenient.

#### **Technical specifications**

Model PTV-14

**Motor** Four motors controlled in 2 x-y directions

Image magnification X, Y, XY, X/Y : ~420X

**Discharge calibration** Real time Discharge Correction (Manually available)

Extension Modules OPM/VFL/OTDR/10GPON

(Optional)

Clamps Metal five in one fixture

Backlit buttons Key backlight design to assist night construction

Applicable fiber type

SM, MM, DS, NZ, NZDS (Including G651, G652, G653, G654, G655,

G657...)

Cleaved Length Diameter: 0.1~3 mm / Cleave Length: 5~16 mm

Cladding Diameter 80~150 μm

Splice loss SM: 0.02dB, MM: 0.01dB, NZ: 0.03dB, NZDS: 0.04dB

Accuracy of the splice loss

measurement function after

splicing

<0.08 dB

**Discharge electrode** ≥ 5000 times

**Splice mode**Splice program preset 500 **Heating mode**200 preset heating programs

Auto heating Support

**Splice time** Standard fusion time is 7 seconds, fast fusion is 6 seconds

**Heating time** Standard heating time 18 seconds, time adjustable

**Return loss** ≥ 60dB

**Splice protector** 20~60mm, support SOC (optional)

Tensile test Tension is ~2.1N

Storage Can store 2.000 images, 20.000 groups of data

Interface GUI graphical operator interface with graphical maintenance

navigation

Battery Capacity

6200mAh, built-in charging, for up to 420 times of welding and

heating

Language Multiple display languages available for user selection

**Elevation** Can work at altitudes from 0m to 5000m

Temperature & Wind Speed -20°C ~ +50°C, wind spped 15m/s

**Humidity** 0~95% (No condensation)

Storage conditions Relative humidity 0~95%, -40°C ~80°C

Power supply method AC 100~240V. DC 10÷18 VDC

Start-up time 3 seconds fast boot

Display

5 inch high definition capacitive touch LCD screen, anti-reflective,

dual control by key/touch

Power output USB reverse charging / lighting

Port USB2.0, Type-C

**Size** 150mm × 146mm × 145mm

Weight 1.48kg (Battery not included), 1.88kg (Battery included)















