

UT691B-30C/UT691B-30T

User Manual



Fiber Optic Engineering Pen

PREFACE

Thank you for purchasing the new Fiber Optic Engineering Pen. To use this product safely and correctly, please read this manual thoroughly.

After reading this manual, it is recommended to keep the manual at an easily accessible place, preferably close to the device, for future reference.

LIMITED WARRANTY AND LIABILITY

Uni-Trend guarantees that the product is free from any defect in material and workmanship within one year from the purchase date. This warranty does not apply to damage caused by accident, negligence, misuse, modification, contamination and improper handling. The dealer shall not be entitled to give any other warranty on behalf of Uni-Trend. If you need warranty service within the warranty period, please contact authorized service center or send the product back with problem description.

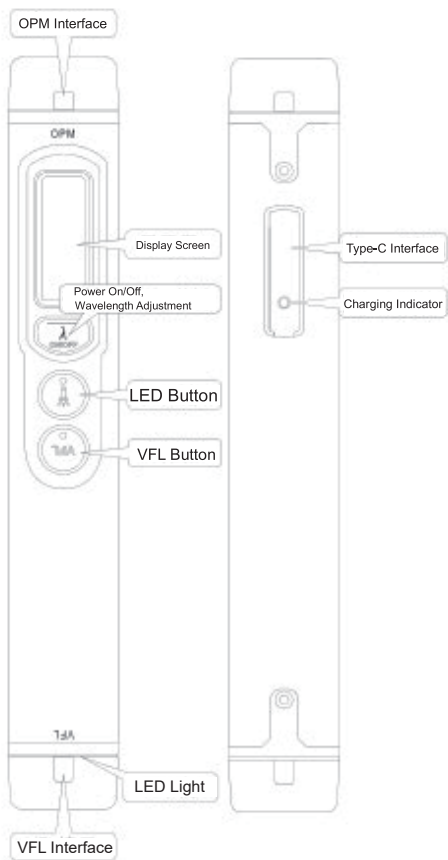
This warranty is the only compensation you can obtain. Uni-Trend will not be responsible for any special, indirect, incidental or subsequent damage or loss caused by any reason or speculation. As some areas or countries do not allow limitations on implied warranties and incidental or subsequent damage, the above limitation of liability and stipulation may not apply to you.

Statement

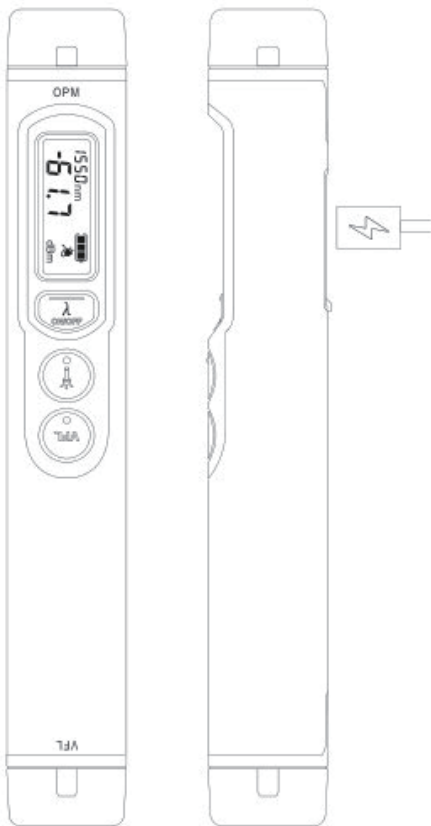
1. Please carefully read and correctly understand the warnings and operating instructions in the user manual before using the engineering pen.

2. Please use the engineering pen correctly in strict accordance with the user manual.
3. Lasers are harmful, so please pay special attention to eye protection. When the laser is working, it is strictly forbidden to look directly into the red light.
4. If you operate the device without reading the user manual or understanding the instructions in the manual, it may cause inaccurate measurement results or damage the device or even endanger personal safety.
5. Laser is a heat-generating device. Generally speaking, the higher the temperature, the shorter the laser life. Try to avoid high-temperature environments when using it, and not recommended to use it continuously for a long time.
6. After using for a period of time, please clean the interface with a special fiber optic cleaning cotton swab.
7. After use, please cover the dust cap to prevent dust.
8. When not used for a long time, the lithium battery may self-discharge and the voltage may be too low to start the device. Please charge it before use.

1. Product Appearance



2. Power On/Off & Charging



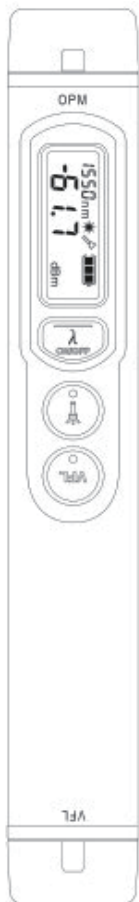
Power On: Short press "  " button to power on the device, and backlight is on; Long press to power off.
(Backlight will be off after 30 seconds without any operation)

Charging: Use a 5V/1A power adapter, and connect the included charging cable to the Type-C charging interface.



The "  " icon lights up to indicate that the power supply is connected. The "  " icon scrolls to indicate that the device is being charged, while remains stationary when the device is fully charged. The charging indicator light flashes during charging and remains on when the device is fully charged.

3. Operating Instructions❶



After power-on, enter the optical power meter interface.

10 Calibration wavelengths:

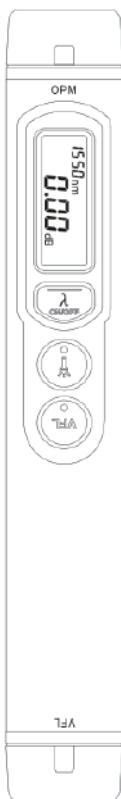
850nm/980nm/1270nm/1300nm/1310nm/1650nm/1490nm/1550nm/1577nm/ 1625nm

Short press "" button to cycle through the wavelengths

VFL: Short press "" button to control the VFL red light on/off or flash.

LED Flashlight: Short press "" to control the LED flashlight on/off.

3. Operating Instructions②



In the power-off interface, long press " " button and

then simultaneously press " " button to enter the offset

setting interface, short press " " or " " button to

adjust the offset value, and the adjustment range is [-5,5];

short press " " button to switch the wavelength, after

adjusting the offset value, long/short press " " button to confirm.

4. Technical Parameters

Model	UT691B-30C	UT691B-30T
Measurement Range	C-type (-50~+30dBm)	T-type (-70~+10dBm)
Response Wavelength	700~1700nm	
Calibration Wavelength	850nm/980nm/1270nm/1300nm/1310nm/1490nm/1550nm/1577nm/1625nm/1650nm	
Accuracy	±0.4dB(1310nm/1490nm) ±0.4dB(1550nm/1625nm) ±1dB(850nm/1300nm/980nm) ±1dB(1270nm/1577nm/1650nm)	±0.2dB(1550nm) ±0.3dB(1310nm/1490nm/1625nm) ±1dB(850nm/1300nm/980nm/1270nm/1577nm/1650nm)
Power Meter Detector Type	InGaAs	

Resolution	0.01dBm
Wavelength Memory Function	√
LED Flashlight	√
Backlight	√
Red Light Source Interface	2.5mm Universal connector
Red Light Source Output Power	30mW
Red Light Wavelength	650nm±20nm
Red Light Mode	CW/2±1Hz Flash
Power Supply	1800mAh Built-in Lithium Battery
Charging Interface	Type-C Interface
Operating Environment	0-50°C@Use; 0-45°C@Charge; <90%RH No Condensation

* Test conditions: $23^{\circ}\text{C}\pm 2^{\circ}\text{C}$, 40%-60%RH, FC/PC

connector.

*T-type accuracy range: -55dBm~+3dBm, other references are as follows:

$\pm 0.8\text{dB}$: +3dBm~+6dBm, -60dBm~-55dBm@1550nm test wavelength,

$\pm 3.0\text{dB}$: +6dBm~+10dBm, -65dBm~-60dBm@1550nm test wavelength;

*C-type accuracy range: -35dBm~+23dBm, other references are as follows:

$\pm 0.8\text{dB}$: +23dBm~+26dBm, -40dBm~-35dBm@1550nm test wavelength,

$\pm 3.0\text{dB}$: +26dBm~+30dBm, -45dBm~-40dBm@1550nm test wavelength.

5. Packing List

Item	Quantity
Fiber Optic Engineering Pen	1
Gift Box	1
Cloth Bag	1
PE Bag	1
Type-C Charging Cable	1
User Manual	1

The manual is subject to change without prior notice!

Due to different batches, the materials and details of actual products may be slightly different from the graphic information, please refer to the actual product received. Experimental data provided on the page is from internal laboratory of UNI-T, but it should not be a reference for customers to place orders. Any questions, please contact the customer service, thanks!

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Made in China

P/N:110401114505X

彩盒 菲林做货要求：

序号	项目	内容		备注
1	尺寸	70X150MM		
2	材质	60g书纸		
3	颜色	单色		
4	外观要求	完整清晰、版面整洁，无斑墨、残损、毛边、刀线错位等缺陷。		
5	装订方式	钉装		
6	表面处理			
7	其它	无		
版本				
DWH 设计	康念园2026/6/4	MODEL 机型： UT691B	Part NO. 物料编号： 110401114505X	
CHK 审核		UNI-T 优利德科技（中国）有限公司 UNI-TREND TECHNOLOGY (CHINA) LIMITED		
APPRO. 批准				