

TFN

F4 SERIES

Make professional testing more convenient

Durable and stable model
Optical time domain reflectometer





F4

Six intelligent functions



OTDR



Visual fault locator



Ethernet test



Remote test



Optical loss test



Optical power test

**Design and development for
high-demand installation
and maintenance troubleshooting**

If you encounter such a problem in their lives



Optical fiber communication system engineering acceptance



Optical fiber and optical cable development and production



Optical fiber communication system engineering fault repair



Optical fiber communication system engineering construction test

Display screen

8-inch large screen

Let the observation image quality soar
The interface is no longer boring



F4 is equipped with an 8-inch color LCD screen, the observation image quality is clearer and the display is smoother

TFN

MENU

F1

F2

F3

F4

F5



OTDR



光损耗测试



光功率计



红光



远程测试



以太网测试



文件管理



帮助



设置

Optical Time Domain Reflectometer

Professional OTDR

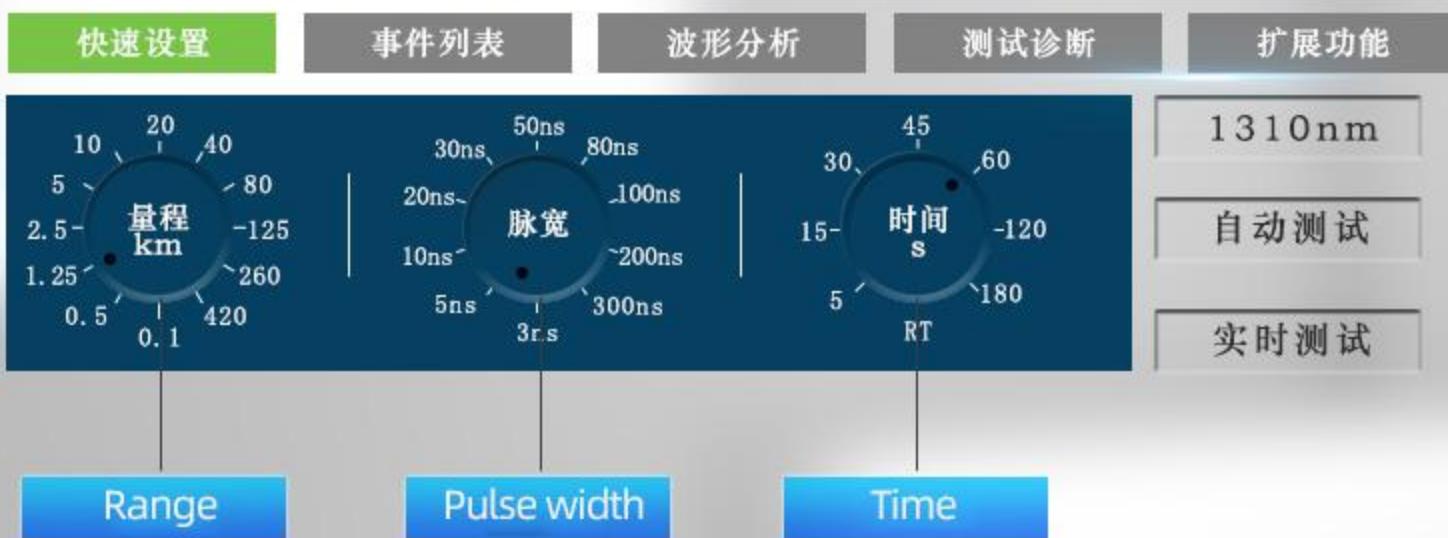
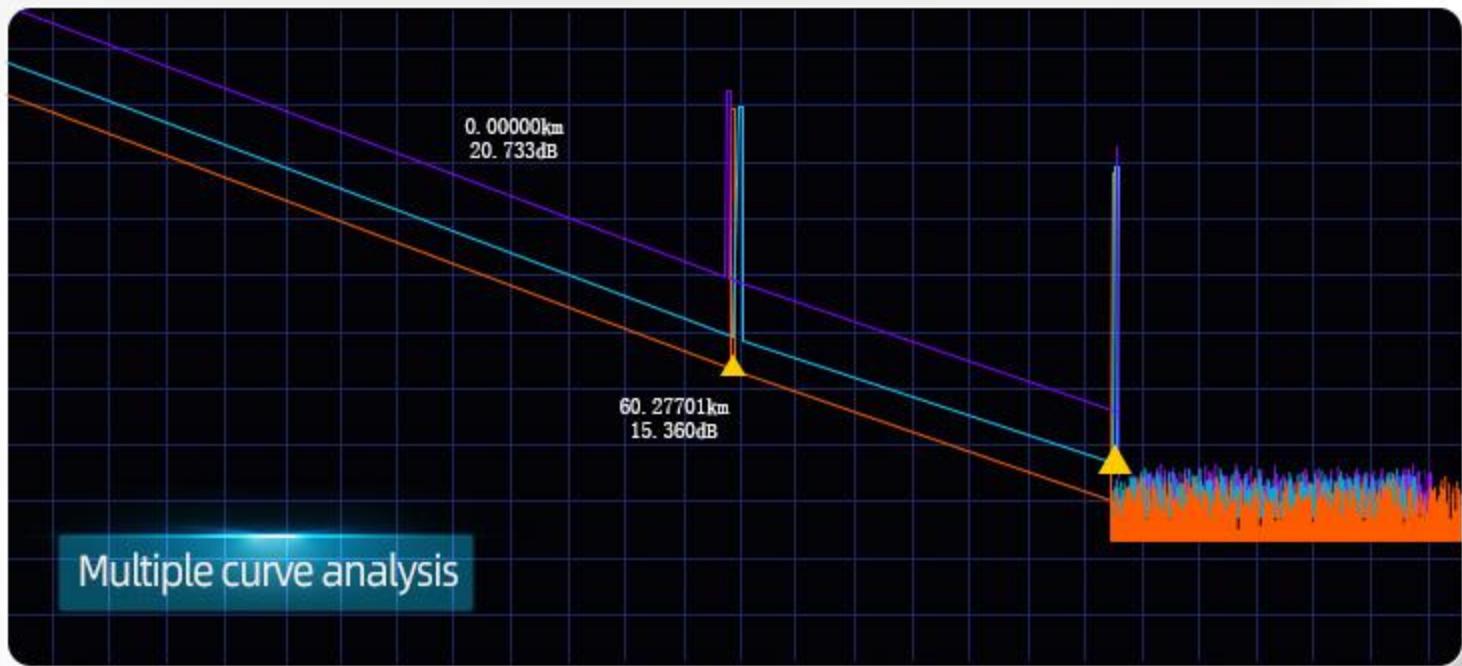
Three measurement mode

Dual wavelength test

F4-V2 has a range of up to 200 kilometers



F4 has three measurement modes, namely automatic mode, average mode, and real-time mode. Average measurement will take the average value of several measurements as the display result. Real-time measurement can observe real-time time when installing optical fiber, such as fusion loss and return loss.



Graphical interface allows manual setting of range, pulse width and measurement time



More operation interface display

Optical power meter

Easy to test optical loss

Dual wavelength test

Ensure high-quality transmission of optical signals



The optical power meter function displays the optical power value of the device under test in dBm and mW in real time, and automatically determines and displays the frequency of the device under test (power value > -20dBm)

1310nm

-20.58_{dBm}

0.70_{uw}

参考功率
0.00dBm

相对功率
-31.58dBm

频率检测
1310nm CW

-31.58_{dBm}

4.76_{uw}

参考功率
0.00dBm

相对功率
-31.58dBm

频率检测
1310nm CW

-52.60_{dBm}

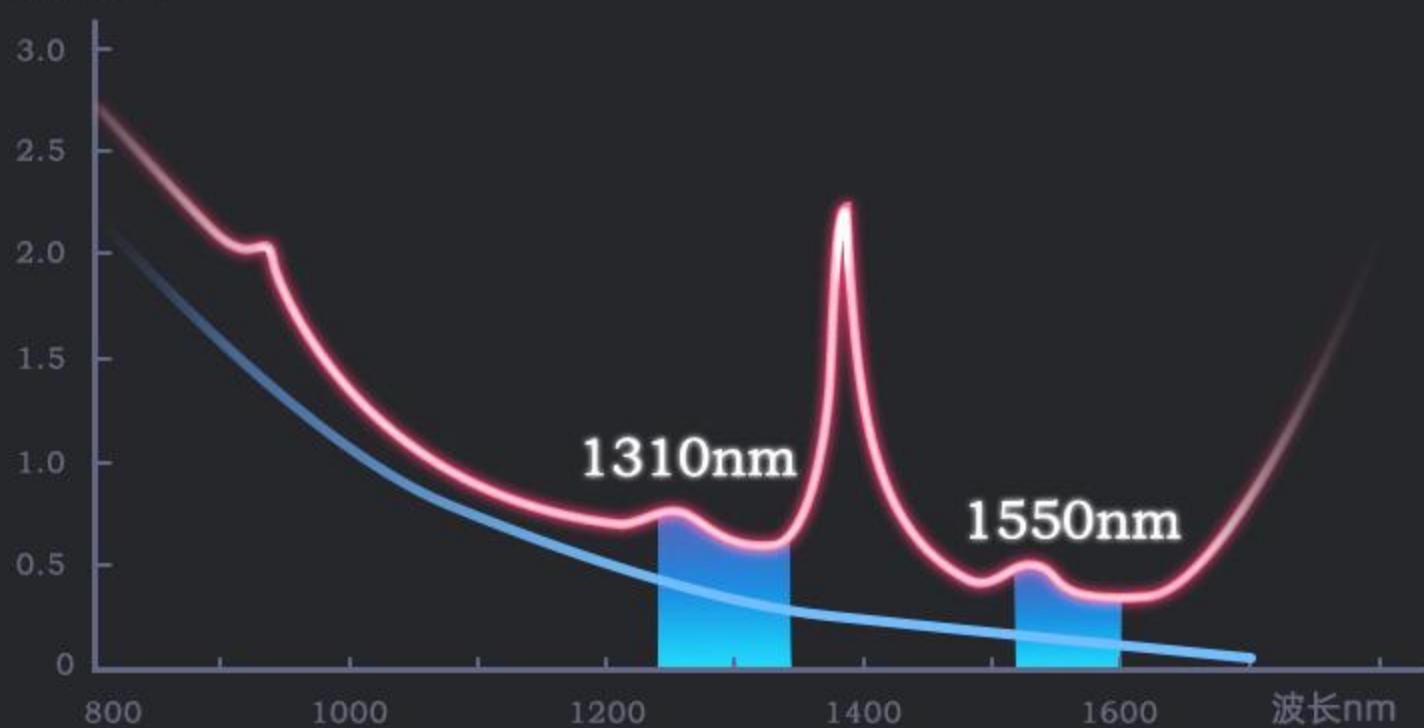
5.49_{uw}

参考功率
0.00dBm

相对功率
-31.58dBm

频率检测
CW

损耗dB/km



Visual Fault Locator

Quickly determine the fault point

Visual Fault Locator

More intuitive observation of breakpoints



Always on



1Hz



2Hz





APP /

Let smart control in the palm of your hand

App-side Bluetooth control device

APP-side can control the OTDR, light source function, optical power meter function, and red light function





光谱分析



Pass/Fail 报告

快速设置

里程	0.0km
脉宽	3ns
波长	1310nm
测试模式	自动
时间	15s
折射率	1.4677

分析设置

分析阈值	0.00
反射损耗阈值	0.00
结束损耗阈值	0.00

显示设置

长度单位	千米
<input type="checkbox"/> 使用滤波	

保存设置

文件名头	
文件名生成规则	1文件名头+波长 G1文件名
预览	多芯测量文件名



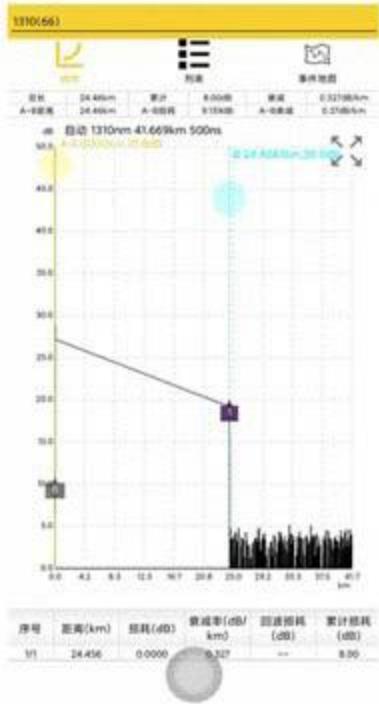
默认



返回



测试



序号	距离(km)	损耗(dB)	衰减率(dB/km)	回波损耗(dB)	累计损耗(dB)
1/1	24.456	0.0000	0.327	---	0.0000



设置



文件



测试

1310(66)	报告	事件地图			
测试条件					
测试模式	自动				
波长	1310nm				
里程	41.7km				
脉宽	500ns				
折射率	1.4677				
测试时间	2022-01-13 09:51:29				
测试结果					
光缆总长	24.46km				
总损耗	8.00dB				
平均损耗	0.327dB/km				
总事件	2	Pass Fail			
序号 类型 距离(km) 损耗(dB) 衰减率(dB/km) 回波损耗(dB) 累计损耗(dB)					
0/1	24.456	0.0000	0.327	---	-8.004 0.0000
1/1	24.456	8.00	0.327	---	8.00



设置



文件



测试

Other functions

Stick to millimeters

Guarantee the smooth flow of optical paths





Ethernet test

IP scan and
PING/PPPOE test



Optical loss test

Test optical
component loss



Remote test

Break the
constraints of space



Appearance introduction



- | | | |
|-----------------------|----------------------------|-----------|
| 1. VFL(λ=650nm) | 2. OPM(OPTIN MAX.+26dBm) | |
| 3. OTDR/OCID | 4. OTDR(λ=1310nm λ=1550nm) | |
| 5. USB | 6. Power interface | 7. Screen |
| 8. Ethernet interface | 9. Ethernet interface | |
| 10. Indicator light | 11. Button operation area | |
| 12. Switch | | |

Technical Parameters

Model	Optical time domain reflectometer			
Project	F4	F4-V1	F4-V2	F4-SMV
Type	Single mode			Single mode and multimode
display	5.8-inch color LCD screen+touch screen			
Wavelength	1310/1550nm			850/1300/1310/1550nm
Maximum dynamic range ①	35/33dB	42/40dB	45/43dB	26/30/37/35dB
Event dead zone	1m	0.8m	0.8m	1m
Attenuation dead zone	6m	6m	6m	6m
Test range	500m /1km /2km /4km /8km /16km /32km /64km /128km /256km			
Test pulse width	5ns / 10ns/ 50ns/ 160ns/ 320ns/ 500ns/ 1000ns/ 5000ns/ 10000ns/ 20000ns			
Range measurement accuracy	$\pm(0.75m + \text{sampling interval} + 0.005\% \times \text{test distance})$			
Loss accuracy	$\pm 0.05\text{dB}/\text{dB}$			
Reflection accuracy	$\pm 3\text{dB}$			
Data storage	≥ 2000			
Optical port type	FC/PC (interchangeable SC, ST)			
Data interface	USB、mini-USB、10M/100M Ethernet port			
VFL output	$\geq 5\text{mW}$			
Light source output	$\geq -5\text{dBm}$			
Optical power meter	+26dBm ~ -50dBm (Replaceable : +6dBm ~ -70dBm)			
Power supply mode	AC/DC adapter: AC: 100V~240V, 50/60Hz, 0.6A Lithium battery: 7.4V 6700mAh, lithium ion			
Operating temperature	$-5^{\circ}\text{C} \sim 50^{\circ}\text{C}$			
Storage temperature	$-20^{\circ}\text{C} \sim 70^{\circ}\text{C}$			
Relative humidity	0-95% non-condensing			
Machine weight	$\leq 1.1\text{kg}$			
Volume	227mm×160mm×70mm			

Note:

- ① Test environment temperature $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$, maximum test pulse width, average number of times ≥ 300 times
- ② Event blind zone test conditions are minimum range, minimum pulse width, fiber end face reflection loss $\geq 45\text{dB}$, typical value

Product Display



