



Telecom Test PDA

User Manual

V6-1.0

Brief Introduction

Thank you for purchasing our telecom test PDA.

This user manual includes function introduction, installation, wiring, operation process, and problems solution. Please read the manual carefully before use, and keep it in safe and convenient place so that you can quickly find it when problems occur.

Notice:

As we continue to upgrade and improve functions and features, the contents of the user manual is subject to change without notice.

We will try to improve this manual to ensure its content accuracy. If you find any errors in this manual, please contact us.

It is strictly forbidden to copy or reproduce all or part of this manual without the written permission of the company.

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Chapter I Product Overview

1. Introduction

The telecom test PDA is based on Android smart phone platform, which is a handheld multi-functional testing device design for telecom operator for LAN test, optical power test, red light source, gigabit speed test, 5G WIFI speed test, and TV functions.

The device can test multiple access methods, including LAN access and optical fiber access. And it can help you confirm whether the user line can open services; evaluate the service quality you provide to the user. This device not only can simulate the user's PC to test broadband IP line, or realize PPPoE dial through the user's modem, but also used in problems verification, such as connectivity of the broadband IP network and the user's modem problem, or eliminate due to the user's PC failure cannot login the webpage.

2. Function List

Function Module	Module Code	Module Classification	Remarks
Barcode	B	With 1D barcode scanning module	Optional
Optical power meter	G	Optical power with 1625nm	Choose one
	7	Optical power with 1577nm	
VFL	H	Red light source	
IPTV	I	With IPTV module	
Gigabit speed	Q	With Gigabit speed module	
5G WIFI	5	With 5G WIFI speed test	
HDMI	M	With HDMI function	
SIM card read-write	S	With SIM card read-write function	Optional

Back jacket	J	With back clip port	Optional
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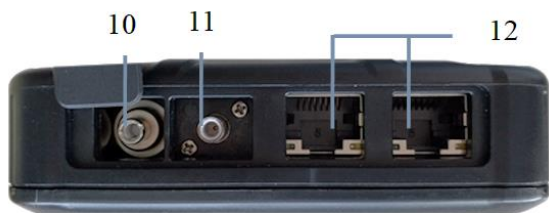
Front camera	A	2 million pixels	Optional
	B	5 million pixels	Optional
	C	8 million pixels	Optional
Rear camera	A	8 million pixels	Optional
	B	13 million pixels	Optional
	C	16 million pixels	Optional

Battery	6	6000mAh capacity	
Memory capacity	2+16	RAM 2G, ROM 16G	Choose one
	3+32	RAM 3G, ROM 32G	
	4+64	RAM 4G, ROM 64G	

Note: The default configuration is: the front camera is 200W, the rear camera is 1300W, the battery is 6000mAh.

3. Components and Functions





Code	Name	Function
1	Telephone receiver	Telephone receiver
2	Front camera	Take photo or video
3	Display	Screen display
4	Rear camera	Take photo or video
5	LED light	LED light also can be used as flashlight
6	Menu Key	Menu key
7	Home Key	Home key
8	Return key	Return key
9	Loudspeaker	Equipment loudspeaker
10	VFL port	Connect with the fiber interface, red light test fiber optic connection
11	Optical power port	Connect with the fiber interface, test optical power
12	Ethernet port	Connect Ethernet for network test
13	USB port	USB port, connect PC or charge

14	MIC	Device MIC
15	HDMI port	Video source tester input port
16	Earphone hole	Connect earphone
17	Card port	Placing a SIM card and a TF card
18	Volume key	Adjust volume of phone call or the loud speaker
19	Power key	Power on/off

4. Main Features

- 1920x1080 IPS true color LCD with touch screen
- Android 9.0 operating system
- Support CDMA bandwidth 1X/EVD0 BC0
- Support TD-SCDMA bandwidth B34 / B39
- Support GSM bandwidth 850/900/1800/1900
- Support TDD-LTE bandwidth B38 / B39 / B40 / B41
- Support FDD-LTE bandwidth B1/B2/B3/B4/B5/B7/B8

- Rechargeable 3.8V 6000mAh polymer battery
- Support 802.11a/b/g/n/ac, WIFI 2.4G and 5G
- Support Bluetooth function
- Support flashlight function
- Volume: 167 * 87 * 25mm (without scanner)
- Weight: 400g

Chapter II Technical Specifications and

Basic Functions

1. Technical Specifications

1.1 Optical Power Index

- Wavelength range (nm): 800~1700
- Photo-sensing material: InGaAs
- Power test range (dBm): -70~+3 (-50~+26)
- Error range: ±5%

- Display distinguishability

Linear display: 0.1%

Logarithmic display: 0.01 dBm

- Universal interface

1.2 Visual Fault Locator Index

- Laser: FP-LD
- Wavelength: 650nm±20nm
- Output power: 1mw/3mw/5mw/10mw (You can choose the different power value)
- Connector: universal
- Working mode: CW or 2Hz modulation
- Applicable fiber: SM/MM

1.3 Gigabit Speed Test

1) Speed test specification

Support Gigabit speed test.

2) Network configuration:

- Support DHCP, PPPOE and static IP Internet connection
- Can set the download thread count
- Can set testing time
- Can set testing URL address

1.4 HDMI

1) Interface

Support HDMI protocol interface

2) Resolution

Support 4K, HD1080P, HD1080I, HD720P, SD480P, VGA, Auto and other resolutions

1.5 5G WIFI

1) Speed test specification

Support Gigabit speed test.

2) Network configuration:

- Can set the download thread count
- Can set testing time
- Can set testing address

2. Basic Functions

2.1 OTG USB Function


Through USB OTG data line can connect PDA to USB, transfer files and data backup. The PDA support USB storage device including U dish, reader and phones which support large capacity USB storage function.

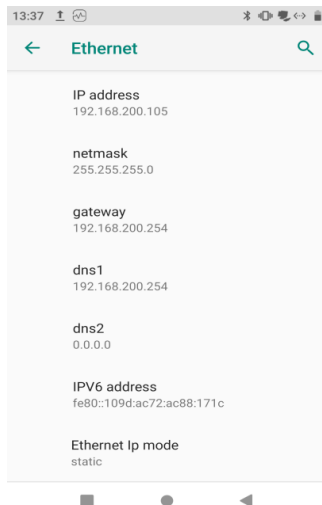
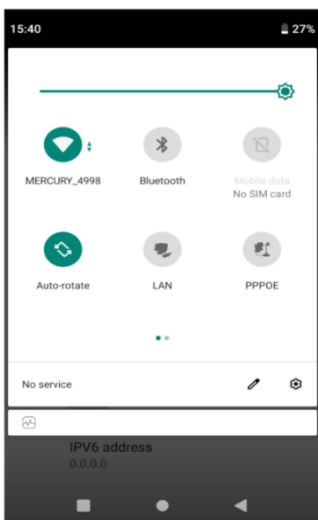
After connecting USB equipment and upload successful it can read the data in the USB storage equipment.

2.2 Charging Function

The device support fast charging. Please use the standard charger for charging.


2.3 Network Card

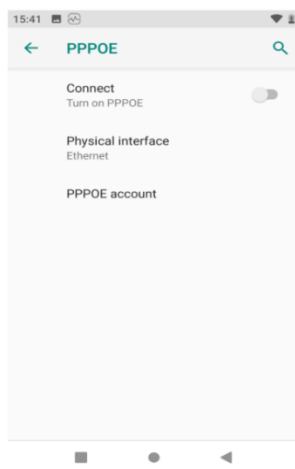
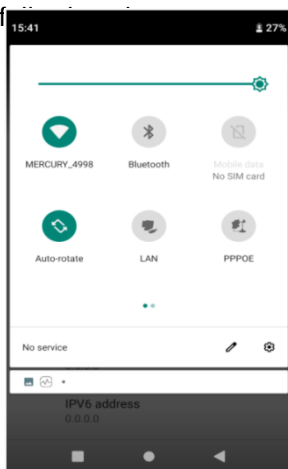
To open the device's network card, pull down the prompt bar and click the LAN icon  long pressing LAN icon can open. You can choose DHCP or STATIC from Ethernet IP mode. Under DHCP mode, click again to get IP address from DHCP server. At STATIC IP mode, you can revise the IP address, netmask, gateway and DNS, DNS including DNS1 and DNS2. You need to set DNS1 firstly.



2.4 PPPOE Dial

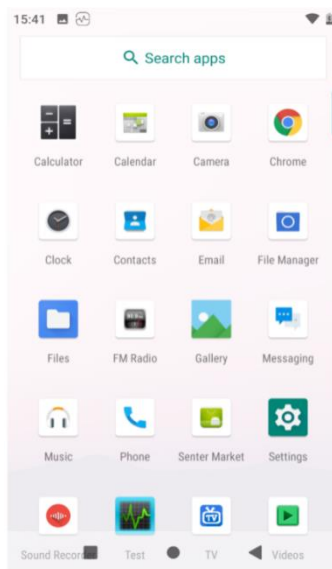
To make PPPOE dial, you need to pull down prompt bar and click LAN to open network card, and long pressing PPPOE

icon , the PPPOE window pop up. Input user name and password, click “Connect” to establish PPPOE link. Please see the f



Chapter III Usage of Main Functions

Swipe up the standby screen, showing main menu, as below:



Swipe up or down to see all menu items. Press the back key to close the main menu. Drag the user's favorite functions onto

the desktop: press and hold the icon to be moved, drag the icon to the position where you want to place. (During moving, keep pressing the icon and do not release)

1. Optical Power Test

Optical power test can test the power of optic fiber signal, insert the pigtail of optical signal to be tested into the optical interface can test optical power, interface as below:

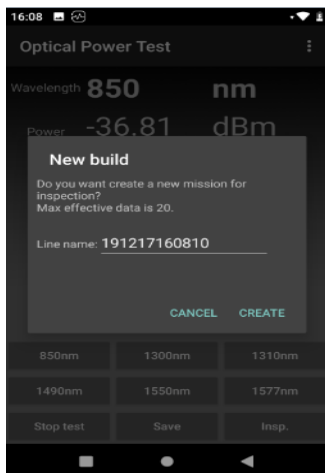


The six wavelengths on screen is calibration wavelength, choose corresponding wavelength can test current optical power value. The test value will be shown in the unit of dBm and nW meantime. User can stop testing by pressing "Stop Test", and displayed the latest test result. Click "Save" key to save the current test result. As shown below:



User can modify the saved file name.

Click “Insp” button can create inspection mission for line inspection operation, as shown below:



Input the name of the line to distinguish different lines. Inspection significance: test different positions optical power value in one fiber, then draw the power curve (similar to the OTDR's test curve), you can view any attenuation values between 2 points.

After establishing inspection mission, click on the inspection button, current optical power value will be added to the inspection record end and will be displayed by the curve graph. The two vertical lines are two movable cursors; drag the cursor to view the power value and difference of any two points.



2. Visual Fault Locator

The device has red light source output, which can output continuous red light or 2Hz modulated light. Click the red light source, the device enters the red light source interface, as shown below:



Click "Open" to turn on the VFL, and click "Close" to turn off the VFL. CW/2Hz is the switch button of the continuous and modulated light, the tester can memorize the VFL mode automatically.

The output power is 1mw/3mw/5mw/10mw (optional).

3. Gigabit Speed Test

1. Gigabit Speed Test Initialization

Function Description: Gigabit speed test module power up and do some initialization work.

Instructions: Connect cable to the tester port and set the network card, and then wait for initialization. Configure the network parameter.

2. Start to Test

Instructions: In the Speed test interface, set up the speed test IP address and number of thread, click "Start", the test data will be displayed.

3. Exit

Instructions: click "Stop" button and return back menu.

4. 5G WIFI Speed Test

1. Module Initialization

Instructions for use: In settings, open "MIMO WLAN" option under "Network and Internet", and then connect to WIFI.

2. Start to Test

Instructions for use: In the speed test interface, set the test IP address and the number of threads, then click "Start" bottom to test, the test result will show.

3. Exit 5G WIFI Test

Instructions for use: Turn off the device's WIFI firstly, and then turn off "MIMO WLAN" under "Network and Internet" in settings.

5. HDMI Function

5.1 Function description

The device can instead of a TV.

5.2 Operation method

Open the TV set-top box, turn on the TV function on the device, and use the HDMI cable to connect the TV set-top box and the device. After the device automatically recognizes and analyzes the resolution of the video source, it will automatically play the audio and video. As shown below:

6. Barcode Scan Function (Optional)

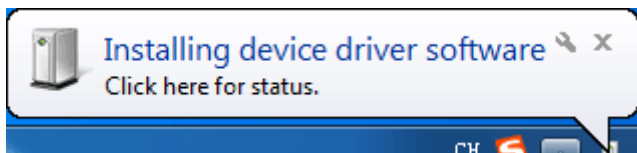
Provide SDK, can do secondary development.

7. SIM Card (Optional)

Support ISO7816 Agreement, provide SDK, can do secondary development.

8. How to Install the USB Driver

Connect the device and PC with USB data line, pull down the prompt bar and showing the USB connect state, click File Transfer, for the first time connect PC, there will installation window appears:



Chapter IV Simple Troubleshooting

If there is a problem with your device, please see the following "Troubleshooting Methods" firstly and carry out the corresponding operation. If the problem is not resolved, please contact professional service personnel.

Problem	Possible Causes	Troubleshooting Method
Unable to start	Press power key not enough	Press the power key more than 2 seconds
	Low battery	Charging the battery
	Poor battery connection	Install the battery again or clean the battery connection point
Some programs don't work	Device storage is not enough	Timely clear the application of inner multimedia message and application download

		records
Insufficient standby time	Degraded battery performance	Change battery
	Long time games and music play	Restrict games and music play time
Charging failed	Poor connection	Check connection, replace socket or plug
	Battery voltage is too low	Will cause no charge display, charge half hour firstly, then unplug and then recharge
	Battery failure	Charge battery
	Incompatible charger mode	Change suitable charger
	Charger failure	Change or repair charger
Failed to connect the Internet	Weak signal	Remove place and try again
	Out of service area	Confirm network signal coverage
Invalid key operation	Unexpected	Remove the battery and

	interference	install it after 1 minute
Cannot call	Device card failed	Check or exchange device card
	Reach to cost limit	Contact operator
Partial calls cannot call	Phone number over digits	Check the number
	Setting issues	Check if set the calling restriction
PIN error	Incorrect password entered three times	Contact operator
Large error	Sensor end face is not clean	Clean Sensor end face