

ERAUD?
NO!!!

THE FAST CHARGING ERA ARRIVED

INFERIOR CHARGING CABLES & CHARGER ARE SUBSTANTIAL.

FNB48P will work with you to expose the ugly face of unscrupulous merchants.

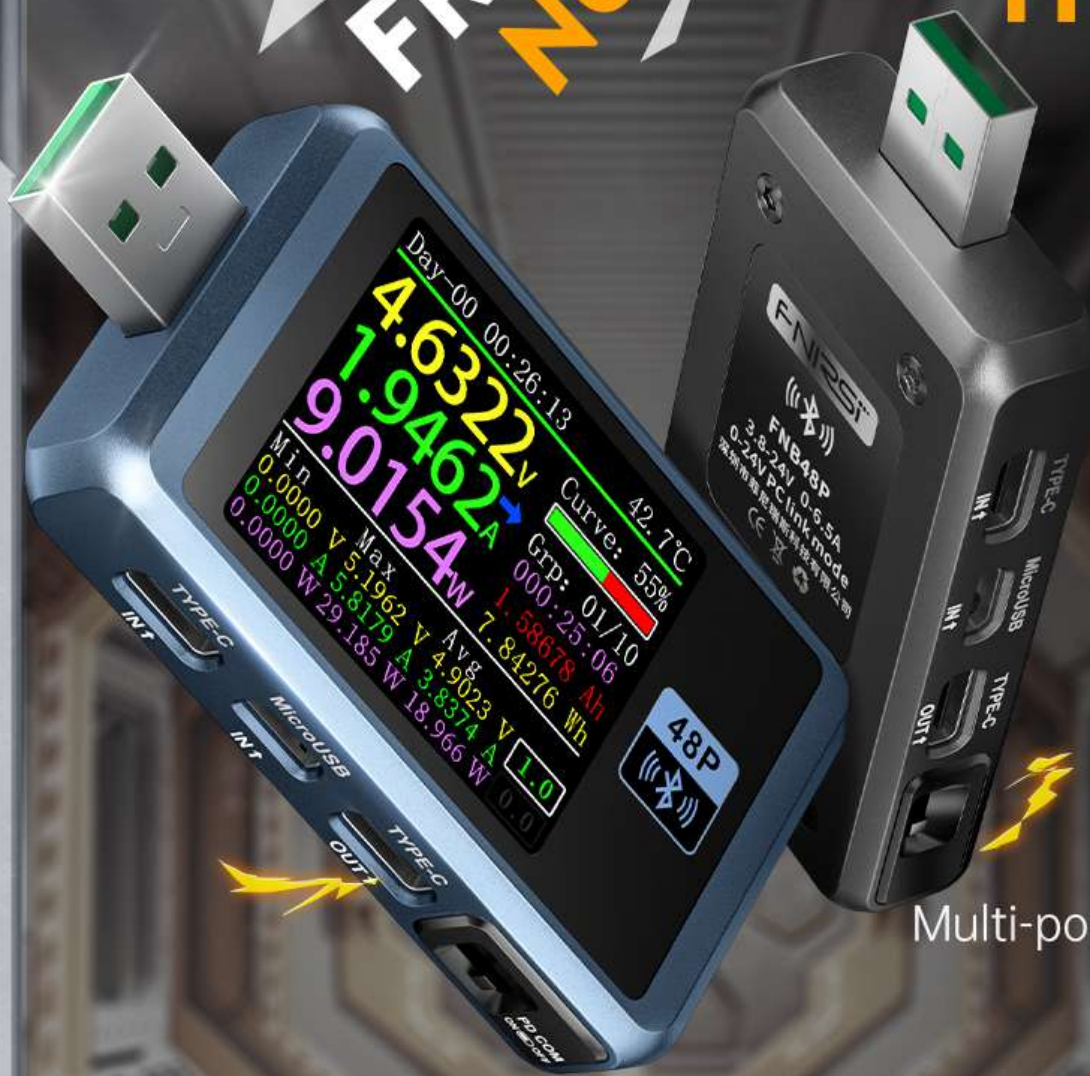


6.5A High current ●

6-Digit Display with high precision ●

Various Fast Charging Protocols ●

Multi-port Compatible: USB, TYPE-C, MICRO Interface ●



CNC METAL SHELL

CNC METAL INTEGRAL MOLDING

ARMED TO THE TEETH

Everyone is a anti-counterfeiter!
All it takes is a good weapon!



1.77-INCH HIGH-DEFINITION
DISPLAY SCREEN
THE DATA IS AT A GLANCE



**MCU MAIN
CONTROL CHIP**

240MHZ ARM M4F SMART BRAIN

**BASED ON THE POWERFUL
CPU,48P HAS MULTI-TASK
PROCESSING CAPABILITY**

240MHZ

 ARM CPU

M4F CORE

 ETM Data Tracking

MPU+FPU+DSP

 Hardware Acceleration

**ADC DIGITAL
CONVERSION CHIP**

**PD PHYSICAL
PROTOCOL CHIP**

MAINSTREAM FAST CHARGING PROTOCOL

DETECTION & DECEPTION DOUBLE BLESSING INFERIOR CHARGER CAN'T HIDE



⚡ PROTOCOL DETECTION:

APPLE 2.4A, QC2.0, QC3.0, PD, Samsung AFC, Huawei FCP
Huawei SCP, OPPO VOOC, DASH, WARP, SuperVOOC, PE+1.1, PE+2.0

WIRE DETECTION

EASY GET WIRE INFORMATION



PD E-Marker

Easily read the CC line data information of the E-Marker chip

```
PD E-Marker
VenderID: 0x0000
Type: Passive
Speed: USB 3.2 Gen2
Length: 0-1 m
Max Vol: 20V
Cur: 5A
Hardware: 0x0000
Firmware: 0x0000
```

DASH cable detection

Able to read DASH cable chip information

```
Read DASH Cable Data
ROM 7Bytes + CRC 1Byte:
09 52 00 bb 11 19 04 57
ADDR 0x20-0x27:
57 04 19 11 bb 00 52 09
Dash cable found!
Verified!
```

Cable internal resistance measurement

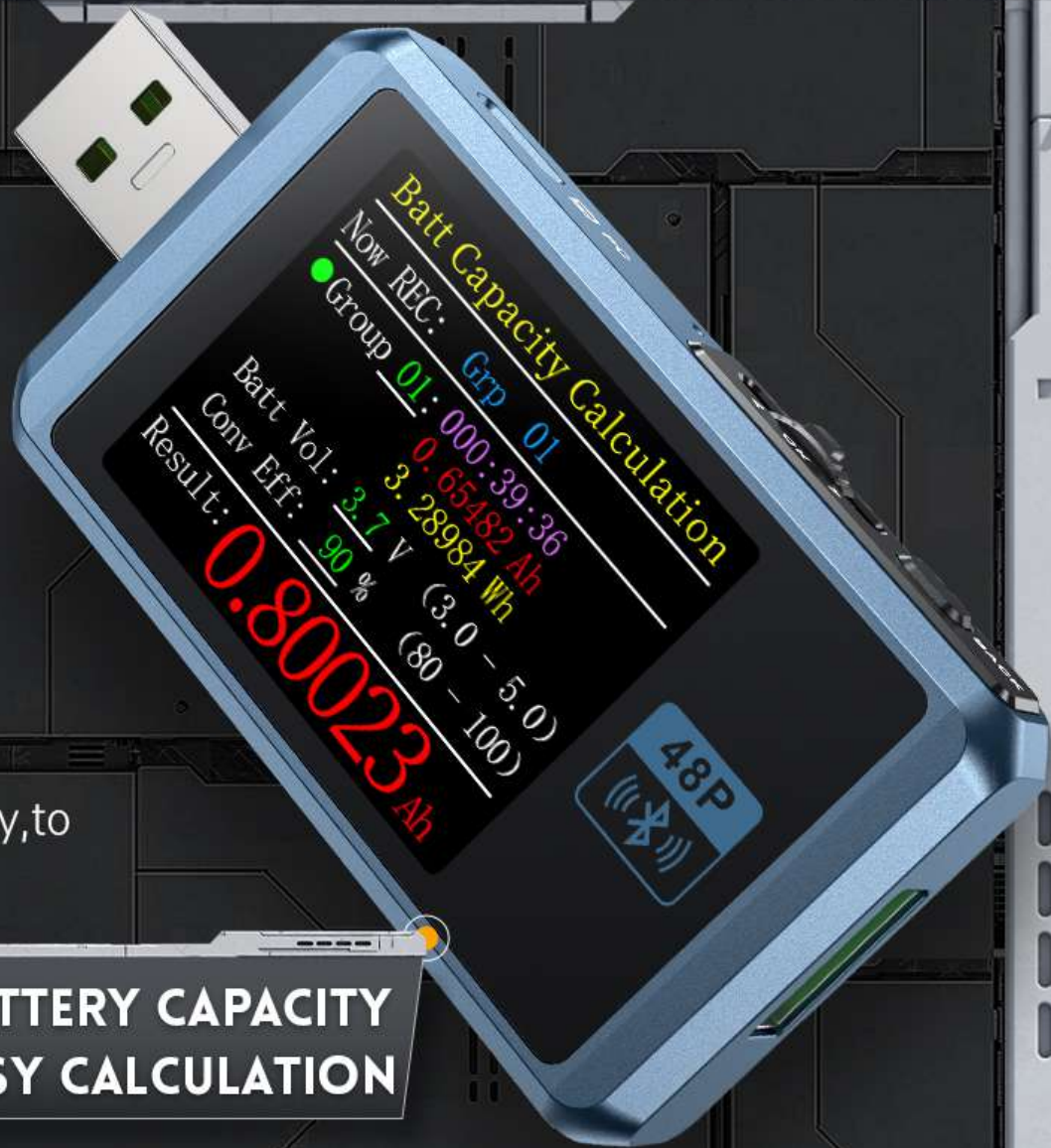
two-step quick measurement of wire resistance with constant current load

```
Cable Measurement
Ref : 5.0121 V 0.9789 A
REAL: 4.9436 V 0.9789 A
Diff: 0.0685 V
Cable Resistance:
0.0700Ω
```

10 GROUPS OF DATA INTELLIGENT RECORDS

Built-in the calculation formula of battery capacity, to conveniently and fastly calculate the charging efficiency and capacity of the target object

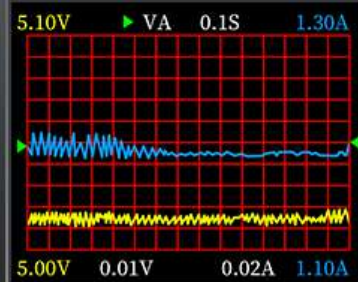
**BATTERY CAPACITY
EASY CALCULATION**



FOUR CURVES TO MEET VARIOUS NEEDS

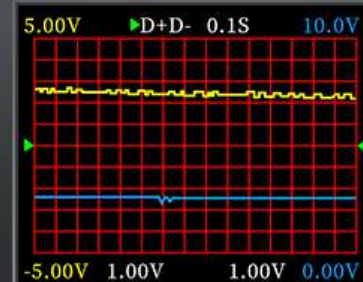
Mode 1

**VOLTAGE
CURRENT
CURVE**



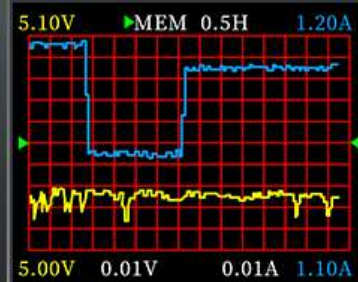
Mode 2

**D+D-
VOLTAGE
CURVE**



Mode 3

**OFFLINE
RECORD
CURVE**



Mode 4

**POWER
RIPPLE
CURVE**
(AC coupling)



GRAVITY SENSOR

⤴ AUTO FLIP ⤵

EQUIPPED WITH A GRAVITY SENSOR,
WHICH SUPPORTS 180° AND 360° AUTOMATIC FLIPPING
(ONLY THE SIMPLE INTERFACE SUPPORTS 360°)



HIGH-PRECISION 6-DIGIT DISPLAY

The maximum resolution is 0.00001, which could real-time monitor the subtle changes in voltage, current and power during charging.

- | | | |
|-----------------|---------------|-------------|
| ① PC interface | ④ TYPE-C IN | ⑦ PD COM |
| ② Function keys | ⑤ MicroUSB IN | ⑧ USB-A IN |
| ③ Return key | ⑥ Type-C OUT | ⑨ USB-A OUT |





PC HOST COMPUTER BLUETOOTH APP

The maximum resolution is 0.00001, which could real-time monitor the subtle changes in voltage, current and power during charging.

NOTE: THE APP NEEDS TO ORDER THE VERSION WITH BLUETOOTH, AND DOES NOT SUPPORT THE IOS SYSTEM.



PROTOCOL TRIGGER INTRODUCTION

Qualcomm QC 2.0

8.9704v	D+ 3.290V
0.0000A	D- 0.545V
	0.0000 W

[1] 5V [2] 9V

[3] 12V [4] 20V

QC2.0 Trigger

Qualcomm QC 3.0

6.7906v	D+ 0.594V
0.0000A	D- 3.021V
	0.0000 W

-200mV +200mV

Now 06800mV

QC3.0 Trigger

HUAWEI FCP

8.9549v	D+ 0.596V
0.0001A	D- 0.004V
	0.0012 W

[1] 5V

[2] 9v

HUAWEI FCP Trigger

HUAWEI SCP

5.0811v	D+ 0.594V
0.0001A	D- 0.004V
	0.0000 W

-25mV +25mV

Now 05000mV

3.4-5.5V ⇄ 5.0A 18W

HUAWEI SCP Trigger

SAMSUNG AFC

8.9550v	D+ 0.594V
0.0000A	D- 0.004V
	0.0000 W

[1] 9V [2] 12V

SAMSUNG AFC Trigger

PD3.0 65.00W

9.8539v	D+ 2.677V
0.0000A	D- 2.677V
	0.0000 W

Gear	1	5.00V	3.00A
	2	9.00V	3.00A
	3	12.00V	3.00A
	4	15.00V	3.00A
	5	20.00V	3.25A
Target	6	3.30-21.00V	3.25A

10.00V

PD Trigger

PD Convert

5.0172v	D+ 0.594V
0.0000A	D- 0.001V
	0.0000 W

1	5V	2.00A
2	9V	1.11A
3	12V	0.83A
4	20V	0.50A

PD2.0 10W Find

QC2.0 to PD Protocol

SVOOC 2.0 10V 6.5A

10.048v	D+ 3.287V
0.0000A	D- 1.917V
	0.0000 W

Click BACK to return

SVOOC Trigger

VOOC/WARP 5V

4.9624v	D+ 2.694V
0.0000A	D- 2.694V
	0.0000 W

-10mV +10mV

Now 05000mV

VOOC/WARP Constant voltage Trigger

PARAMETERS

Note: There are two colors of FNB48P. The Black one is the version without Bluetooth, and the blue one is the version with Bluetooth.



INDEX	RANGE	RESOLUTION	ACCURACY
Monitor voltage	4~24V	0.00001V	±(0.2%+2)
Monitor current	0~6.5A	0.00001A	±(0.5%+2)
Monitor power	0~156W	0.00001W	±(0.5%+2)
Load equivalent internal resistance	0~9999.9Ω	0.0001Ω	±(0.5%+2)
D+/D- voltage	0~3.3V	0.001V	±(1.0%+2)
Equipment temperature	°C	1°C	±(1.2%+3)
	°F	1°F	±(1.2%+4)
Capacity	0~9999.99Ah	0.00001Ah	
Energy used	0~9999.99Wh	0.00001Wh	
Cable resistance	0~9999.9Ω	0.0001Ω	
Operation hours	99 days 23 hours 59 minutes 59 seconds	1S	
Record time	999 hours, 59 minutes and 59 seconds	1S	