





# PTU22-M8 S Handheld Test Module **User Manual**

Thanks for purchasing this product, please read these instructions carefully before installing, operating or maintaining this product

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# **Safety Warnings**

- 1) Installation in any damp, condensed-phase environment with inflammable and explosive gas is forbidden. Do not operate the product with wet hands.
- 2) You are prohibited from touching the conductive part when the product is operating.
- 3) Do not install the product at places where gas media can cause metal corrosion and insulation damage.
- 4) To avoid dangerous accidents, the product must be installed strictly according to the instructions.
- 5) After unpacking the product, check if the product is damaged and the items are complete.

## CHNT PTU22-M8 S Handheld Test Module User Manual

#### Use Purpose and Application Range

This document provides the normal operating conditions, main specifications and technical parameters, operation panel introduction, key introduction, main function figures and maintenance introduction of handheld test module PTU22-M8 S (hereinafter referred to as handheld module).

This document is applicable to handheld module which is an auxiliary component of moulded case circuit breaker. The handheld module is mainly used for on-site setup and commissioning of new type moulded case circuit breaker.

#### 2 Normal Operating Conditions

- 2.1 Surrounding controller temperature
  - (a) The upper limit should not exceed +40°C
  - (b) The lower limit should not be less than -5°C
  - (c) The average value in 24h should not exceed  $+35^{\circ}$ C
- 2.2 Altitude

The altitude of the installation site should not exceed 2.000m.

2.3 Atmospheric conditions

The relative humidity under the highest temperature (+40°C) of the installation site should not exceed 50%; higher relative humidity is allowed under lower temperature; the maximum average relative humidity in the wettest month should not exceed 90% and the average temperature of the same month should not exceed +25°C. Condensation on product surface due to temperature changes should be considered.

#### **3** Main Specifications and Technical Parameters

3.1 Product model and definitions

PTU - refers to Hand Test Unit

22 refers to frame size of NM8N-250 and above

M8 refers to NM8N series moulded case circuit breaker

S means connect with S terminal wire

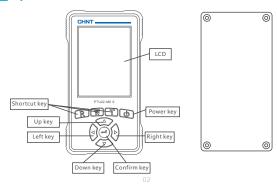
**3.2** Basic parameters and key performance indicators



#### Table 1 Basic parameters

Charging parameters	Micro-USB port, 5V/1A
Battery capacity	3000mAh (typical value)
Operating voltage	3.7V ~ 4.2V
Charging method	MicroUSB port , +5V voltage
Control method	Push key
LCD size	3.2 inches, vertical display
Backlight brightness	1 ~ 100 levels adjustable
Energy saving screen saver	30 ~120 seconds adjustable, can be set to OFF
Battery level monitoring	Yes
Operating temperature	-5°C~40°C
Wire communication	Use 1.5m S terminal wire for communication line Communication baud rate: 1200bps/2400bps/4800bps/9600bps/19200bps
Charging cable	Use standard Micro USB cable for Android phones

#### **4** Operation Panel



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#### 4.1 Key introductions

Power key: press and hold for 2 seconds to turn on or turn off the unit.

Up and down keys: (1) Move up and down to select menu item.

(2) After selecting the parameter, press up or down key to change the value, press and hold the key to speed up the change.

Left and right keys: move to previous or next page, press and hold the left key for two seconds to return to menu page.

 $Confirm\ key: select, confirm\ and\ save\ parameter.$ 

Shortcut key R: enter parameter inquiry page.

Shortcut key W: enter parameter setup page.

Shortcut key T: enter release test page.

#### **5** Connection of Communication Line

When connecting the communication line provided in the package with the handheld module, please align the mark on the line with the mark on the case of the handheld module first, then insert the line into the green terminal hole and tighten it.

#### **6** Main Function Illustrations

#### 6.1 Phase current display page

This page shows the three-phase current, N phase current and grounding current of the circuit breaker. The green tick at the bottom means the communication is normal; if a red cross is shown, it means the communication is disconnected or faulty.

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#### **6.2** Parameter inquiry page

This page shows the communication address, make-break status, frame size and rated current, phase current and characteristic parameters of the circuit breaker. The green tick at the bottom means the communication is normal; if a red cross is shown, it means the communication is disconnected or faulty.



#### 6.3 Release test page

This page is used to test the release function of the circuit breaker. Select Yes to send release command, and the circuit breaker will release. Select No to exit.

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#### **6.4** Menu page

This page shows all the menus, including parameter display, fault alarm, switch information and system setup. Each item has its own sub items. Use  $\mbox{\rm Up}$ or Down key and confirm  $\underline{\text{key to select the item and ent}}\text{er its sub items}.$ 



#### 6.5 System setup page

This page is used to conduct system parameter setup. The baud rate and parity bit are changeable; the default settings for baud rate and parity bit are 1,200 and No Parity. The range of communication address is 1 ~ 247.

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#### **7** Maintenance

The ambient temperature and humidity of application site must comply with the specifications in the use instructions.

#### **8** Outline and Installation Dimensions



**CHNT** Certificate of qualification



# **QC PASS**

**PTU22-M8S Handheld Test Module** IEC/EN 60947-2

> PD1 Check 30

Test date:Please see the Packing

ZHEJIANG CHINT ELECTRICS CO., LTD.