

# Processor ZHY-K datasheet



### ◆ Product profile



The integrated processor can be connected up to 64 weighing units, which can realize the accurate identification of the number of items through parameter configuration. The product is used in new retail areas for scenarios such as vending machines, smart shelves and automation storage management.

#### ◆ Product function

- 1) The device info(such as ID, IP) can be configured by communication interface.
- 2) It's able to receive material configuration information, including material number and specification, weight and tolerance.
  - 3) Reporting weight, material qty, previous weight and material qty regularly.
  - 4) Reporting sensor online status in real time.
  - 5) It can display the equipment operation status.

#### ◆ Product characteristics

- 1) Connection number of sensing units Up to 64
- 2) It can be connected with the indicators, electronic display screens and other peripheral devices;
- 3) There are various communication interfaces, such as RS485, RS232 and TCP/IP,
- 4) Compact size for easy installation

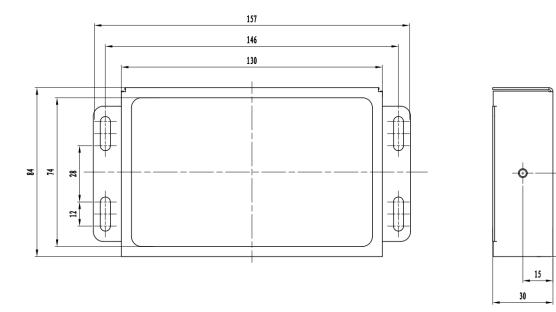


# ◆ Specifications

| Item                       | Specification         | Note                     |  |
|----------------------------|-----------------------|--------------------------|--|
| Operating                  | -20℃ ~ +60℃           |                          |  |
| temperature                |                       |                          |  |
| Power supply               | DC 420/40V            |                          |  |
| voltage                    | DC 12~18V, $\pm$ 0.5V |                          |  |
| communication<br>interface | Ethernet, 1 port      |                          |  |
|                            | RS422, 2 ports        | connection port for load |  |
|                            |                       | sensing unit             |  |
|                            | RS485, 2 ports        |                          |  |
|                            | RS232, 1 port         |                          |  |
| IO output control          | 2 ways                | One port is12V,the       |  |
| port                       | 2 ways                | other way is option      |  |
| IO input                   | 4 ways                | 12V signal detection     |  |
| detection port             | 4 ways                | 124 Signal actection     |  |

### ◆ Outline dimension

Outline: length 157 mm $\times$ width 84 mm $\times$ high 30 mm (including shell)

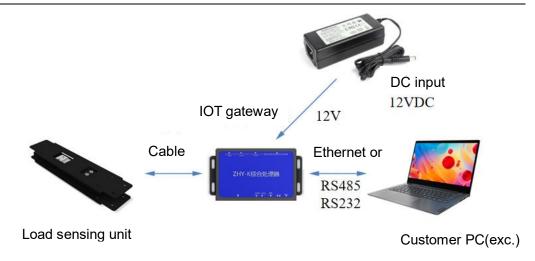


Picture 1 Outline

### ◆ Connection

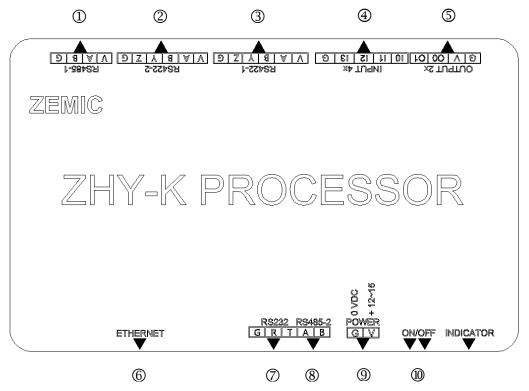
1) Object identifying system connection overview





Picture 2 connection topological diagram

### 2) Processor Port definition



Physical Interface Port definition

| Interface port No. | Port definition | Note   |
|--------------------|-----------------|--|
| 1                  | RS485-1         | Electronic Tag led communication               |
| 2                  | RS422-2         | Load sensing unit port,<br>addressing No.33~64 |
| 3                  | RS422-1         | Load sensing unit port, addressing No.1~32     |



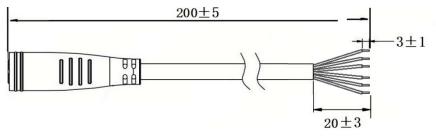
| 4  | Input 4x        | For 12V IO detection            |  |
|----|-----------------|---------------------------------|--|
| 5  | Output 2x       | Output control for other device |  |
| 6  | Ethernet port   | Connecting with Master server   |  |
| 7  | RS232           | Reserve ports for communication |  |
| 8  | RS485-2         | Reserve ports for communication |  |
|    |                 | for Master and Slave            |  |
| 9  | Power           | Power supply 12V                |  |
| 10 | Switch          | Power switch                    |  |
|    |                 | Green: operating                |  |
| _  | Indicator light | Yellow: error                   |  |
|    |                 | Red: power                      |  |

### 3) Wiring and Connecting of cable plug

Wiring table for connection between processor cable and port ②or③(RS422 ports)

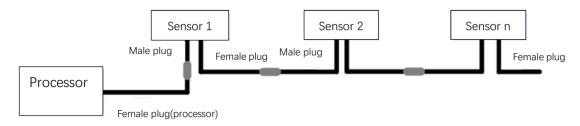
| No. | Wire color | Port marking | Function      |
|-----|------------|--------------|---------------|
| 1   | Red        | V            | Sensor power  |
| 2   | White      | A            | RS422_R+      |
| 3   | Green      | В            | RS422_R-      |
| 4   | Blue       | Y            | RS422_T+      |
| 5   | Yellow     | Z            | RS422_T-      |
| 6   | Black      | G            | Sensor Ground |

# Processor cable with female plug dimension (mm)

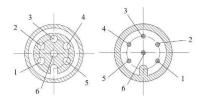


The cable connection between processor and load sensing unit is as below.

Regarding to cable connection to related port of processor, please refer to processor port definition.







Female plug Male plug