

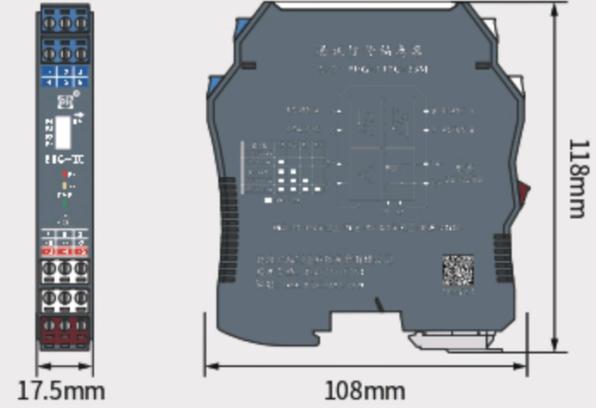
# Communication signal input signal isolators

## PHG-11TC-33M

1 input 1 output

Input: RS-485 Half Duplex Digital Signal

Output: RS-485 Half Duplex Digital Signal



### Overview

The PHG-11TC-33M is signal isolator with communication signal, which can realize the two-way communication of RS-485 Half Duplex digital signal in the onsite and control room. The circuit provides power distribution for on-site instruments. The voltage value can be switched through the top dial switch. The specific operation method is shown in the chart below.

This product needs independent power supply, and the power supply, input and output are isolated.

Distribution power	K1	K2	K3	K4
12V/50mA				
9V/50mA	■			
8V/50mA	■	■		
6V/100mA	■	■	■	
5V/100mA	■	■	■	■

■ ON

### Specifications

#### Input:

Input signal: RS-485 Half Duplex Digital Signal

Distribution voltage: Provide power distribution for field instruments: 5V, 6V, 12V, 24V

#### Output:

Output signal: RS-485 Half Duplex Digital Signal

Transmission delay:  $\leq 10\mu\text{s}$

Transmission rate:  $\leq 1.2\text{kbps}\sim 56\text{kbps}$

#### Basic parameters:

Supply voltage: 20~35V DC

Power consumption:  $< 3.6\text{W}$  (24V power supply, 6V/100mA power distribution)

LED indicator: Green: Power indicator

Yellow: The control room transmits signals to the on site

Red: transmitting signals from the site to the control room

Receiving and transmitting switching time:  $\geq 20\text{ms}$

Temperature parameters: Working temperature:  $-20^{\circ}\text{C}\sim +60^{\circ}\text{C}$

Storage temperature:  $-40^{\circ}\text{C}\sim +80^{\circ}\text{C}$

Relative humidity: 10%~95% RH no condensation

Insulation strength:  $\geq 2000\text{VAC}/\text{min}$  (between input/output/power supply)

Insulation resistance:  $\geq 100\text{M}\Omega$  (500 V DC)

(between input/output/power supply)

EMC: GB/T 18268(IEC 61326-3-1)

MTBF: 80000h

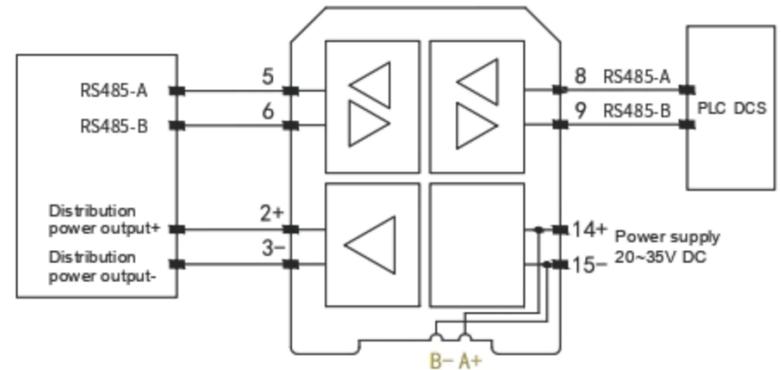
Wire requirements: Horizontal cutting surface  $\geq 0.5\text{mm}^2$

Insulation strength  $\geq 500\text{V}$

Applicable field equipments: Communication interface device with

RS-485 Half Duplex Digital Signal

### Connection wiring



Note: The power rail function is an optional function, and users need to specify the power supply method when placing an order

The selection of power rail connectors can refer to page 89 of the "Annex"