

## Parameters

### Electric Parameters:

Working voltage	DC12~30V
BUS power consumption	60mA/DC24V
Measuring voltage	AC100~250V
Maximum current in each channel	16A

### Environmental Conditions:

Working temperature	-5°C~45°C
Working relative humidity	Up to 90%
Storage temperature	-20°C~+60°C
Storage relative humidity	Up to 93%

### Approved:

CE

RoHS

### Production Information:

Dimensions	72×90×66 (mm)
Weight	242g
Housing material	Nylon, PC
Installation	35mm DIN rail installation
Protection degree	IP20

## HDL Buspro Definition for Cable

CAT5/CAT5E	HDL Buspro	HDL Buspro/KNX
Brown/ Orange	DC24V	Red
Brown white/ Orange white	COM	Black
Blue white/Green white	DATA-	White
Blue/ Green	DATA+	Yellow

## Installation Step

- Mount the device on the DIN rail inside the DB box.
- Mark up the load cable and power supply cable.
- Make sure the connection of load and HDL Buspro is correct.
- Check the HDL Buspro connection.

## Safety attention



- The screw down strength is less than 0.4Nm
- Installation Position: Distribution Box (DB)
- Do not make wrong connection on Bus interface, it will damage the Bus interface of this module
- Never let liquids get into the module, it will damage this device
- Do not get AC power into Bus wire, it will damage all devices in the system
- Avoid contact with liquids and aggressive gas

## Overview



**SB-DN-PM1P03** is a single-phase intelligent digital power meter that measures and records electric parameters. It can be used for power consumption recording. It can record and save the electrical parameters for the last year. And the current, voltage, power and power factor can also be measured by the meter. The current, voltage, power consumption, time, UV Switch, etc. It can be programmed for the logic input. It has 3 separate channels, the maximum current for each channel is 16A. The extra current transformer can be added in high power detection.

## Functions

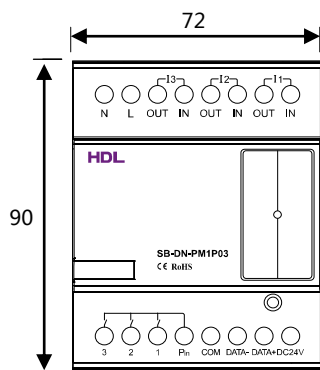
- The voltage, current, power, active power, reactive power, apparent power, power factor, etc.
- 24 Logic Blocks: The Phase voltage, current of each channel, time, channel electric degree in specified time interval, Universal Switch can be used as the logic inputs to trigger the control target. The logic relations are AND, OR, they can be set to trigger the delay time.
- Recorded data can be stored for one year. The record can be checked from the application software by month, day, hour or minute

## Important Notes

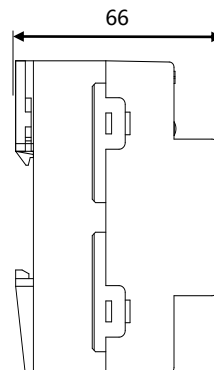
- Bus cable – CAT5E or HDL Buspro/KNX cable
- BUS Connection – Series connection (hand-in-hand)
- Maximum current in each channel is 16A, when it is not connected to the current transformer



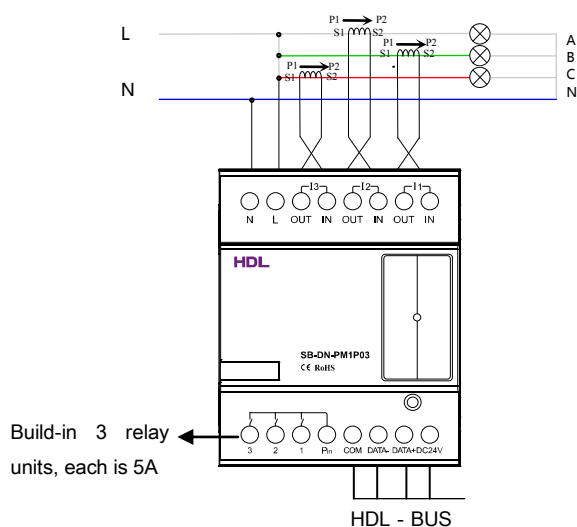
## Dimensions and Wiring



Front View

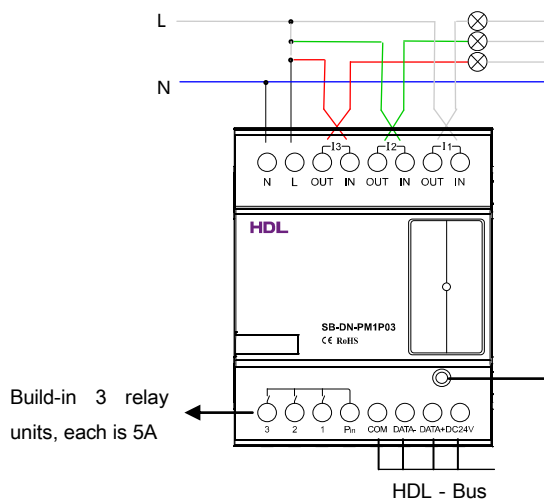
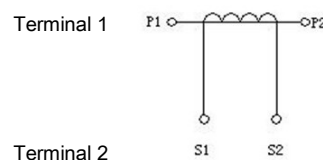


Side view



Connection for meter which wired with current transformer

When use current transformer, mark up "status info" in the HDL Buspro software. The transformation ratio should be corrected.



Connection for meter which has not current transformer

When there is no current transformer, maximum current of each channel is 16A. The transformation ratio should be written "1" in the "status info" menu.

Module Indicator, flickers when the module is working properly. Keep pressing the indicator for 3 seconds, the address of the module can be modified by HDL Buspro Software.