SHP100-F Broadband power line cummunication cable extender module

As a simple and easy-to-use Ethernet transmission module, SHP100 can shorten the development cycle and reduce the design threshold for users. The module provides a set of Ethernet interface and a 12V DC output (output power can be up to 5W). Users can easily transmit data on the power line (220V AC power line) through the module. SHP100 is an industrial power line carrier communication module, which adopts the technology of HD-PLC and is developed for the industry application. The module has a high-performance broadband carrier chip and has the characteristics of high integration and high reliability. Shp100 uses OFDM modulation technology, the modulation frequency band can be up to 2-28mhz, the maximum transmission rate of physical layer can be up to 240Mbps, embedded automatic relay routing protocol, and the maximum support level 10 relay.
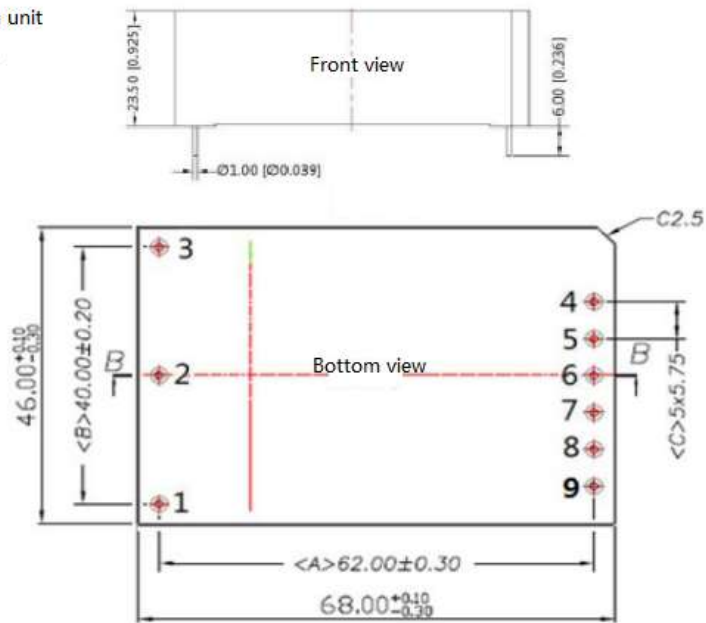
Performance advantages

SHP100 has the following advantages over Homeplug AV technology:

- High reliability: industrial temperature design, supporting - 40 ℃ ～ 70 ℃ temperature range
- Strong anti-interference: in applications with low bandwidth requirements, anti-interference and transmission distance can be guaranteed by closing high-frequency channel
- Long transmission distance: Long transmission distance: point-to-point communication, maximum 1.5km on armored cable, maximum 2km on coaxial line
- Support relay mode: support up to 10 levels of relay, with transmission distance up to 10km
- Strong load capacity: the maximum number of slave nodes in a single network is 512
- Low power consumption: single machine power consumption is less than 1.2W
- The input is AC-DC dual-purpose, with input voltage range (AC 85-305VAC; DC 120-432VDC)
- Provide users with a 12V DC output and 5W power, which can supply power to the user's service board

Overall dimension of module

The overall dimension of SHP100 module is 68mm x 46mm x 23.5mm. The external interface is one channel of 220V AC input (carrier channel), one channel of 12V DC output, one channel of Ethernet interface, a total of 9 pins.

Dimension unit mm {inch}

Front view

Module interface introduction

SHP100
Bottom view

1:NC
2: AC(N)
3: AC(L)
4: +12V
5: GND
6:TXP (ETH-1)
7:TXN (ETH-2)
8:RXP (ETH-3)
9:RXN (ETH-6)

Order Information

Product Description	Order Code
Ethernet Cable Extender	SHP100-F