SHP300-H Long range power line cummunication relay mode ethernet cable extender HD-PLC

SHP300 is an industrial power line carrier communication device, which adopts the technology of HD-PLC and is oriented to the industry application. SHP300 uses OFDM modulation technology, the modulation frequency band is 2-28mhz, SHP300-H can set modulation frequency to extend communication distance. The maximum transmission rate of physical layer can reach 240Mbps, the embedded automatic relay routing protocol, the maximum support for 10 level relay, can transmit high-definition video, audio signal and all kinds of data.
SHP300-H provides a set of Ethernet interfaces and a 12V DC output (output power up to 5W). Users can easily transfer data on the power line (AC or DC power line) through the module reliably. It can be widely used in power equipment data acquisition, solar photovoltaic communication, charging pile data acquisition and monitoring, building visual intercom, industrial data acquisition and control, railway switch machine gap monitoring, etc toll station monitoring, traffic light monitoring and other occasions where power line is needed for data communication.

Performance advantages

SHP300 HD-PLC has the following advantages over Homeplug AV technology:

λ Industrial temperature design, supporting - 40 ℃ ~ 70 ℃ temperature range

λ In applications with low bandwidth requirements, anti-interference and transmission distance can be guaranteed by closing high-frequency channel
λ Point-to-Point communication, maximum 1.5km on armored cable, maximum 2km on coaxial line
λ Support up to 10 levels of relay, with transmission distance up to 10km
λ The maximum number of slave nodes in a single network is 512
λ Power consumption is less than 1.2W

Boundary dimension

The overall dimension of SHP300-H is 60mm x 45mm x 30mm. The external interface is one AC / DC power input (carrier channel multiplexing), one 12V DC output and one Ethernet interface. The power input wire is about 30cm long, and the network wire and 12V DC output wire are about 30cm long.

SHP300-H Boundary dimension

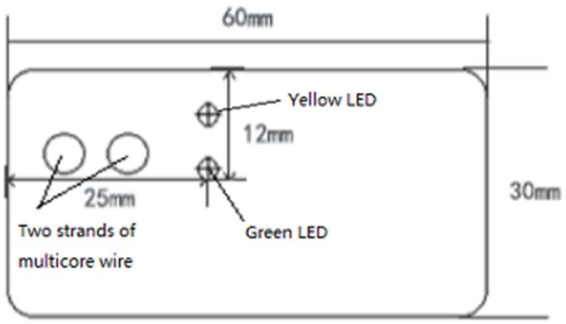
Electrical characteristics

Functional Characteristics		
Power line interface	Modulation Mode	Wavelet-OFDM
	Modulation Band	2~28MHz
	Physical layer / effective transmission rate	Up to 240Mbps/92Mbps
	Error Correction Method	Convolutional code and Solomon code
	Encryption Method	AES-128bit
Performance Parameter	working Temperature	-40℃~+70℃
	Working Humidity	20%~85%
	Size	68 X 46 X 23.5 mm
	Power Supply	85~305VAC or 120~432VDC
LAN Interface	Standard	IEEE 802.3/IEEE 802.3u

	Communication Mode	10Base-T/100Base-TX

Module interface Introduction (top view)

The input end of SHP300 power supply is a two-core cable. The DC 12V output and network cable use a six core cable. SHP300 also has two LED indicators, one green and one yellow. The green light is always on, which means the normal connection of PLC. The yellow light is the network port indicator.



Order Information

Product Description	Order Code
Ethernet Cable Extender	SHP300-H