

HomePlug AV200 Ethernet Powerline Module

Model: 7HP12

Introduction:

The main chip of 7HP12 power communication module is designed by Qualcomm. It has the characteristics of high integration and small size. It can provide power line transmission rate up to 200Mbps, with stable operation and reliable performance.

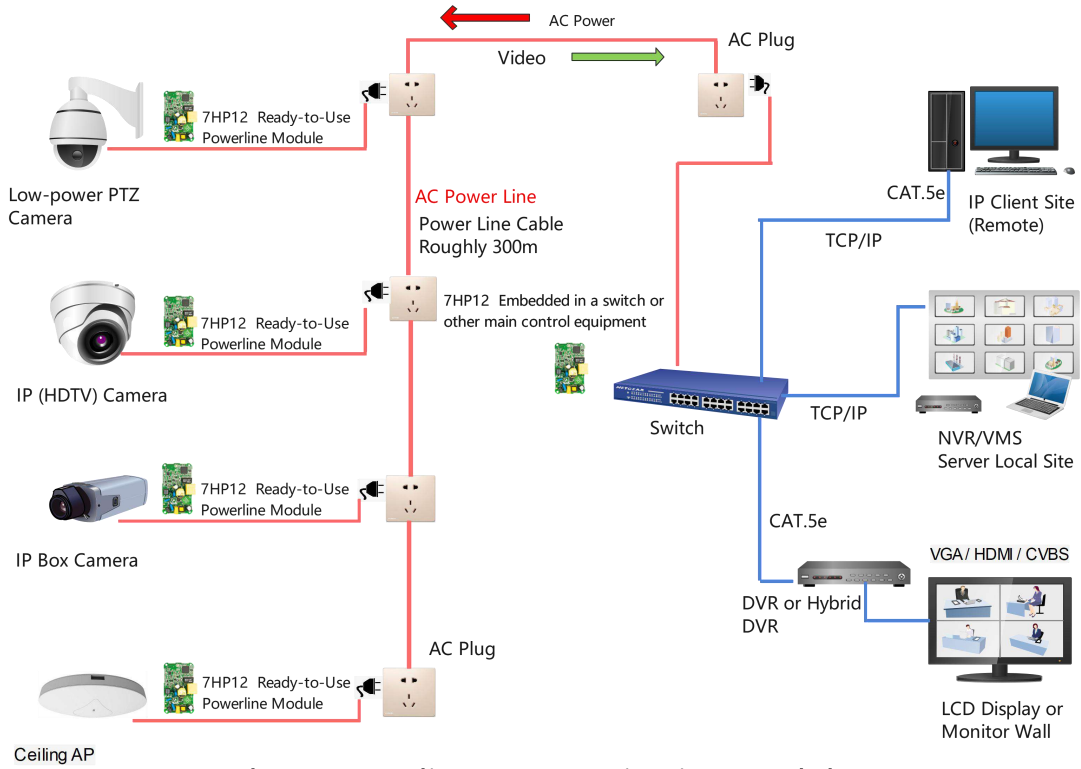
7HP12 power communication module provides users with AC signal (power) transmission interface, working status indicator light and network interface.

Features:

- *Supports up to 8 nodes;
- *Support IEEE802.3, IEEE802.3u standards;
- *Support HomePlug AV, IEEE1901 standard;
- *Transmit data through existing power lines, providing physical layer transmission rates up to 200Mbps;
- *10/100Mbps adaptive Ethernet interface;
- *Supports 300meters transmission distance (within the same meter range);
- *Supports 128-bit AES encryption to ensure the security of network data transmission;
- *Supports any operating system, including Win, Mac, Linux

Typical Application Topology:

7HP12 200Mbps Power Line Communication Module Typical application



200Mbps Power line Communication module
Meet 8 node access



Pin Definition:



Pin Function Details:

J1: Mains Power/Signal Input Interface (AC 100V-220V/50~60HZV;50/60HZ)

Pin Number	Pin Definition	Input/Output	Pin Function
1	L	\	AC 100V~220V power supply L (live) wire input
		\	The carrier signal is on the same line as the above power line
2	N	\	AC 100V~220V power supply L (live) wire input
		\	The carrier signal is on the same line as the above power line

LED: Status indicator, indicating the working status of the module.

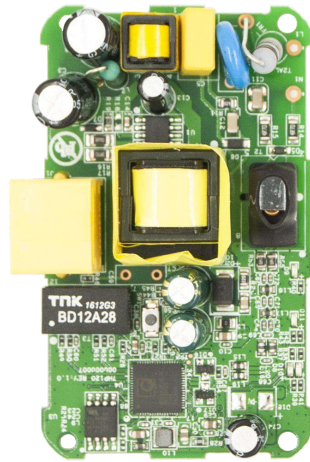
LED No.	Indication	Function
1	Lan	Steady off; If flashing Red light: PLC connection rate is lower than 20Mbps
2	Data	Green On: Powerline Communication Connected; Blinking: Data Transmitting.
3	Lan	Green On: Lan Port Connected; Blinking: Data Transmitting.
4	Power	Green On: Power On; Blinking: Searching to Pair

Electrical Characteristics

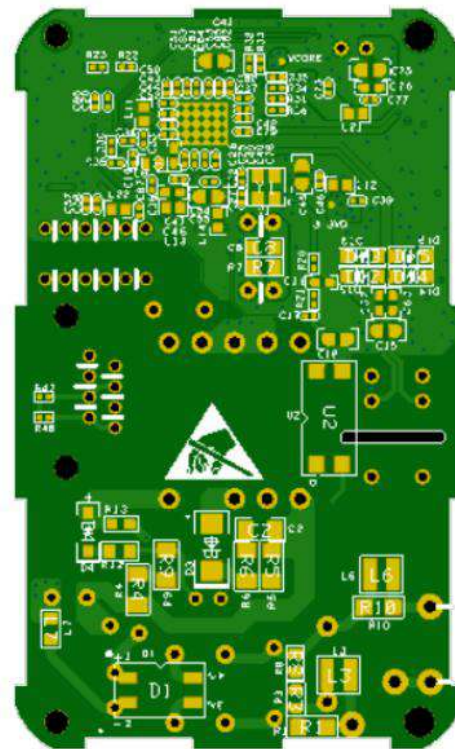
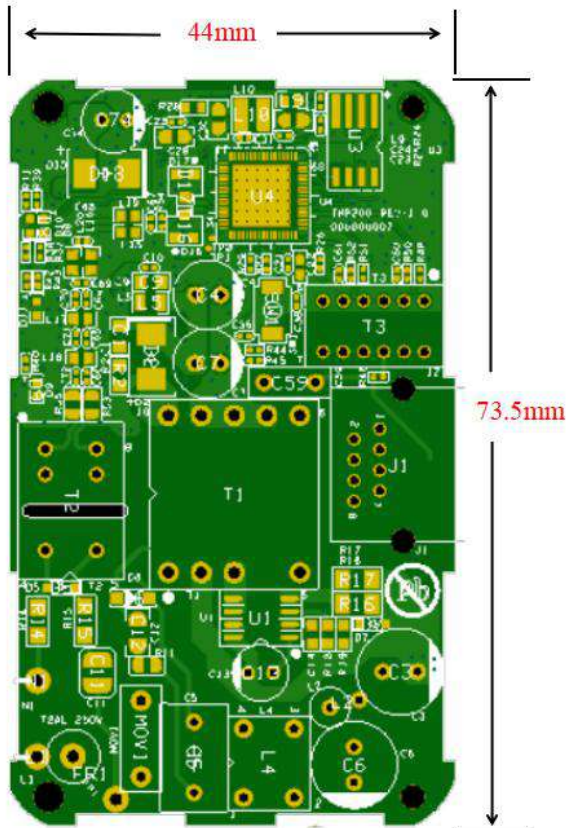
	Min.	Typical	Max.	Unit
AC Work Voltage	100V	220V	240V	V
	\	\	\	A

Module Size:

Front view:



Size:



Specifications:

Hardware Specification	
Model Number	7HP12
Standard	HomePlug AV, IEEE 802.3, IEEE 802.3u, IEEE 1901
Protocol	TCP/IP, IGMP, CSMA/CA, QoS
Modulation	OFDM (1024/256/64/16-QAM, QPSK, BPSK 和 ROBO Modulation)
Frequency Band	2-30MHz
Speed (PHY)	200Mbps
Interface	AC Interface, Ethernet Interface
LED Indicator	Power, Data, LAN
OS	Windows 98SE/ME/2000/2003/XP/Vista, Windows7, Linux, Mac OS
Transmission Distance	300meters (The same Power Meter)
Coverage	5000 Square Inches
Security	128-bit AES Encryption
Working Voltage	AC220V
Consumption	Normal ≤ 5W
Size	73.5x44x18mm (LxWxH)
Weight	25g
Environment	
Working Temperature	0°C ~ 70°C
Storage Temperature	-20°C ~ 70°C
Working Humidity	10% ~ 90% RH Non-Condensing
Storage Humidity	5% ~ 90% RH Non-Condensing