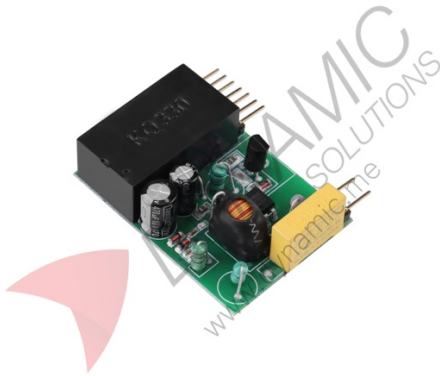


KQ-130F Power Line Carrier Module 220VAC



Features:

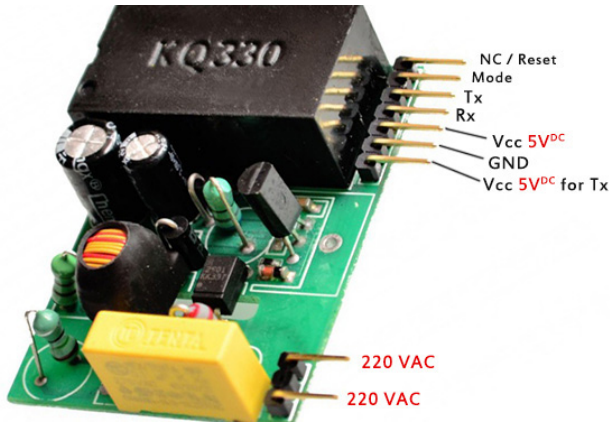
The KQ-130F Power Line Carrier Module is designed for stable and reliable communication over existing 220V AC mains while powered by a +5V DC supply. It uses a 120–135kHz carrier frequency with a TTL-level serial interface, ensuring strong performance even in noisy environments. The module supports frame sizes up to 252 bytes, has excellent out-of-band rejection, and provides dual +5V supply inputs for optimized transmitting and receiving modes. With high electrical insulation and compact design, it is well-suited for smart home networks, industrial automation, and energy monitoring systems.

Specifications	
Working Frequency	120–135 kHz
Connector Baud Rate	9600 bps
Effective Data Rate	~100 bps
Max Frame Length	≤252 bytes
Receive Sensitivity	≤1 mV
Out-of-Band Rejection	≥60 dB
Bandwidth	≤10 kHz
Insulation Resistance	≥500 MΩ (500V)
Withstand Voltage	AC–GND 3000V (1 min)
Power Supply	DC +5V
Receiving Current	≤11 mA
Sending Current	≤230 mA
Operating Temperature	-25°C ~ +70°C
Operating Humidity	≤90%
Dimensions	53 × 45 × 10 mm
Weight	~30 g
Usage	Smart home, industrial automation, PLC communication

Pinouts:

Pin Name	Type	Description
AC	Input	220V Live wire (or Neutral)
AC	Input	220V Neutral wire (or Live)
+5V	Power	+5V supply for transmit mode (≤230 mA)
GND	Power	Digital circuit ground
+5V	Power	+5V supply for receive mode (≤11 mA)
RX	Input	TTL-level data input (connect to MCU TX)

TX	Output	TTL-level data output (connect to MCU RX)
MODE	Input	Mode select: HIGH/disconnected = normal, LOW (GND) = alternate
RST	Input	Reset pin (active LOW, optional)



Product Pictures:

