



HighTek HK-5107

Isolated 4-Port RS485 Splitter

User Manual

1. Introduction

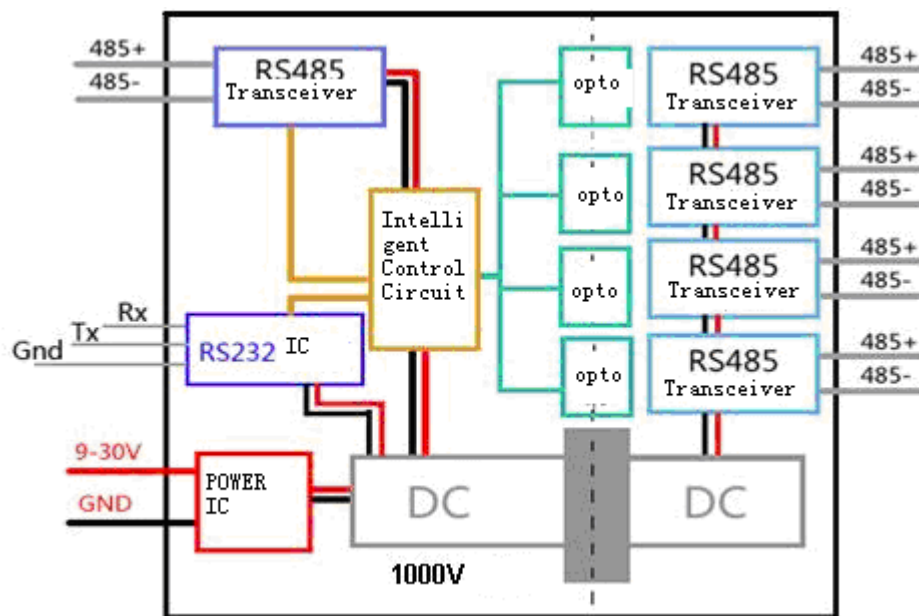
Which is a product designed to solve complex electromagnetic environment, RS-485 requirements of large-scale systems designed for RS-485 bus splitter. In order to ensure safe and reliable data communications, the next bit 4 RS-485 interface, optical isolation are used to provide 2500V optical isolation, power isolation and surge protection circuit, to provide electromagnetic isolation voltage up to 1000V, can effectively suppress surge, ESD and common mode interference. Built-in intelligent data flow control circuit that can automatically sense the data flow and automatically switches enable control circuit, RS-485 data, zero-latency forwarding. The next-bit 4-port RS-485 all have the short-circuit, open circuit protection. When a lightning strikes or equipment failure, problems will be isolated segment in order to ensure the normal work of the other network segments. And can be built-in smart chip diagnosis of problems occurred in that interface, so that engineers can quickly locate the point of failure, which greatly improved the performance of the existing RS-485 network reliability, effectively reducing the network maintenance time . Using standard industrial grade module ,9-30V wide input voltage and stable performance. Is widely used in consumer systems, monitoring systems and data acquisition systems, etc., is a high performance data interface communications products.

2. Performance indicators and parameters

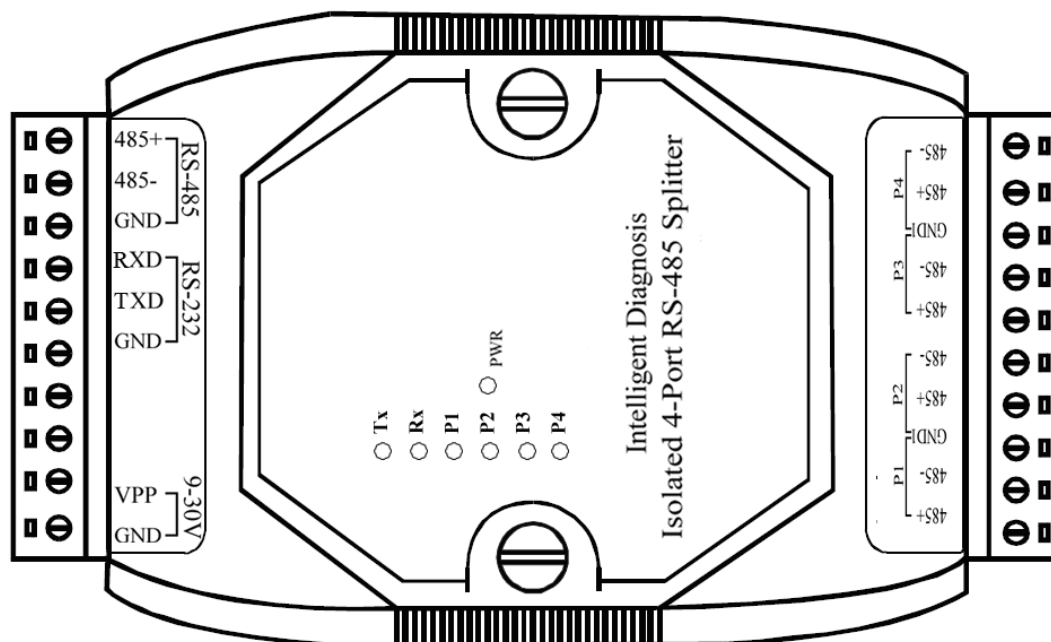
- Interface standard: Compatible EIA/TIARS-232C, RS-485
- Communication speed: 300bps-115.2Kbps, automatically be able to switch, adaptive baud rate
- Input: 2 wire RS-485, (485 +, 485 -), or RS-232 three-wire (Rx, Tx, GND)
- Output: 2 wire RS-485 (485 +, 485 -)
- Connector: plug-type terminal blocks (10)

- LED: Power, Tx, Rx, P1, P2, P3, P4 (re-use two-color, under the direction of digital receiver and intelligent fault instructions)
- Isolation Voltage: 1000V (DC-DC magnetic separation), 2500V optical isolation
- port protection: RS-232 15KVESD protection, RS-485 interface, surge protection circuit, 600W / Line
- Transmission distance :0-3KM (115.2Kbps-9600)
- Operating Temperature: -25 °C ~ 75 °C
- Storage temperature: -25 °C ~ 80 °C
- Relative humidity :5-95%, non-condensing
- Power input :9-30VDC
- Size: 115 × 70 × 25 mm

3. Structure



4. Wiring diagram and signal direction



PWR ----- power indicator light; power supply normal, LED constant light red.

TX ----- send indicator. From the upper RS-485 or RS232-side down to bit 4-channel RS-485 to send data, the indicator light (green).

RX ----- receive light. From the upper end of RS-485 or RS232 from the next bit 4-channel RS-485 receive data, the indicator light (yellow).

P1, P2, P3, P4-under-bit 4-channel RS-485 corresponds to upward-bit RS-485 port to send data, the corresponding P1, P2, P3, P4 light (yellow).

5. Warranty

The company's products offer three packs from the date of shipment services. However, by the natural disasters (such as floods, fires, etc.) environment, climate disruption, and other misuse, abuse and unauthorized replacement or repair of parts such acts which led to product failure or damage is not beyond the scope of the warranty. Within one month after customer purchases, such as in a normal installation and use under the failure, the company will unconditionally replace the new product, one-year warranty free of charge.