LHS3

3 Ports RS485 Fieldbus Isolation Hub

- Support RS485 fieldbus
- IP30 protection, 35mm DIN-Rail
- Fault intelligent cut function
- Two power supply redundancy
- Industrial design, no fan, low power consumption,
- Strong anti magnetic interference, anti radiation

Introduction

The LHS3 is an industrial isolation hub which designed specially for extension of RS485 fieldbus cable transmission. It can extend double communication distance (depend on rate) to realize electrical isolation between multiple fieldbus nodes, has the function of very strong anti interference. At the same time realize signal regeneration and increase the number of nodes and change network topology,The product can be placed directly behind the fieldbus master station, single cable convert into double cables.

The LHS3 supports 3 independent RS485 fieldbus data cable interface. Complete electrical isolation between each other, any one electric interface data input will be output from the other two electrical interface. The products have fault intelligent cut function, when one section of fieldbus network has failure, other two sections can not be affected. The product supports a variety of network topologies: point to point, chain type, star type, and on the basis it can be combined into more complex network structure.

The product is made by our original proprietary technology,data transparent transmission,switch the direction of data automatically,without any of the settings. Support all RS485 fieldbus speeds, rate adaptation. Solves the problem of the extending distance transmission. The products inherit and keep all the advantages of the RS485 fieldbus, achieve long distance transmission, electric and ground isolation and reduce interference. The products solve the problem of electromagnetic interference, ground loop interference and lightning damage. At the same time,the products have the following advantages: industrial design,low power consumption,isolation protection, fault intelligent cut, relay alarm output, IP30 protection,aluminum case,35mm DIN-rail installation, wide power supply(DC10-36V)input, dual redundancy power supply etc.

1. Support RS485 fieldbus full rates(0~1Mbit/s), rate adaptation, data transparent transmission, nanosecond signal delay
2. Support the double extension of RS485 cable transmission distance(depend on rate)
3. Support various optical fiber network topologies: point to point, star type, chain type, and on the basis,it can be combined into more complex network topology structure
4. Electrical interface supplied by independent power supply module, completely isolated between RS485 feildbus and RS485 fieldbus, and RS485 fieldbus and equipment; at the same time adopt

photoelectric isolated technology, separate internal communication and data signal interference, effectively protect communication equipment from power ground loop and surge

5. Electric interface provides 1500W anti lightning surge protection of every line, 15KV electrostatic protection, prevention of total interference, and self-recovery over-current protection function

6. Has the fault intelligent cut function, power monitoring, relay automatic alarm function

7. Rich LED status indicator, all-round display RS485 state

8. Two independent power supply redundancy, wide power supply(DC10-36V), DC1500V power supply isolation, with 1A reverse connection protection function

9. Industrial design, no fan, low power consumption, strong anti magnetic field, anti radiation and anti interference function

10. Corrugated metal case with high strength,IP30 protection,35mm DIN-Rail

Specification

Electrical interface

Interface type: 5 PIN Terminal

Data rate: 0~1MBit/s,Rate adaptation

Signal delay(electrical port):100ns

Offer 1500W anti lightning surge protection, 15KV electrostatic protection, prevention of total interference, and self-recovery over-current protection function

Wire Terminal Resistance: None

Power and Protection

Input Voltage:DC24V(DC10V-36V)

Input Current:100mA@24V

Voltage protection: offer L1+/M/L2+ reverse connect protection

Current protection: 1A(short-circuit protection)

Relay alarm output: electrical port fault and fiber link fault alarm output

Contact rating:DC30V@1A, AC120V@1A

Environmental

Operating Temperature: -10 to 70℃ (-40℃ to85℃ optional)

Ambient Relative Humidity: ≤ 95% (non-condensing)

Storage Temperature: -45℃ to 85℃

Mechanical

Dimensions:136mm×52mm×105mm (H×W×D)

Casing: IP30 protection, Aluminum metal case with high strength

Installation: 35mm DIN-Rail

Weight :800g

Industrial standard

EMI：EN55022 1998, Class A

EMS：

EN61000-4-2 (ESD), Criteria B, Level 4

EN61000-4-3 (RS), Criteria A, Level 2

EN61000-4-4 (EFT), Criteria B, Level 4

EN61000-4-5 (Surge), Criteria B, Level 2

EN61000-4-6 (CS), Criteria B, Level 2

En61000-4-8 (PFMF), Criteria A, Level 3

Freefall：IEC 60068-2-32

Topology structure

This series of products support various optical fiber network topologies: point to point network, daisy chain network, star network topology

Applications

Electric power, transportation, energy, monitoring and industrial control and so on.

Order Information

Model	Specifications	unit
LHS3	Industrial RS485 Isolation Hub, (support point to point),three independent electrical port, support various network topologies(point to point, daisy chain and star network)	pcs