

IT-3000-OCT

8-port cards insert Optical Isolation RS-485/422 Hub

Features

1. 8 ports cards insert optical isolation RS485/422 HUB
2. Star structure, bi-directional Converter RS232 to RS485/422 or RS485/422 repeater
3. Reach up to 3000m at the rate of 9600bps
4. 600W surge protection, 15KV ESD protection, built-in short circuit protection
5. Each port 3000V optical isolation separately
6. Support stage connection, each port support 256 nodes loopback
7. Data direction auto-turnaround, no flow control is necessary



Introduction

IT-3000-OCT is a type of RS-485/422 bus division concentrator of high performance. IT-3000-OCT adopts the unique equipotential differential isolation and bus division concentration technology to effectively such problems as ground potential difference, impedance matching and lightning strike frequently seen in engineering wiring process. Users can easily optimize the RS-485/RS-422 bus structure, divide the network section and improve the communication reliability.

The fault network section shall be isolated in case of lightning strike or equipment faults to ensure the high communication reliability of other network sections. Such performance of IT-3000-OCT can significantly improve the reliability of existing RS-485/RS-422 network, and effectively shorten the network maintenance time. Reasonable utilization of IT-3000-OCT can enable you to design unique RS-485/RS-422 system.

Insert Card Structure

IT-3000-OCT is a type of 8-port insert card photoelectric isolation RS-485/422 bus division concentrator, which is available for random configuration of insert card by users, and can realize the dual conversion between RS-232 and RS-485/RS-422 as well as he

RS-485/422 relay function. It is only need to replace or add insert card in case of damage and capacity expansion to effectively improve the maintenance efficiency.

Photoelectric Isolation of Industrial Level

Normally, RS-485 bus is required to link up different equipment for coordinated operation in industrial control domain. Due to environmental differences, ground potential differences among equipment may affect the normal communication of equipment. IT-3000-OCT aims to provide photoelectric isolation above 3KV for

all ports for the purpose of solving the transmission problems incurred by distance and differences in ground potential (IT-3000-OCT can adapt to the RS-485/422 transmission mode, which is provided with 5-digit industrial terminal).

Protection for Short and Open Circuits

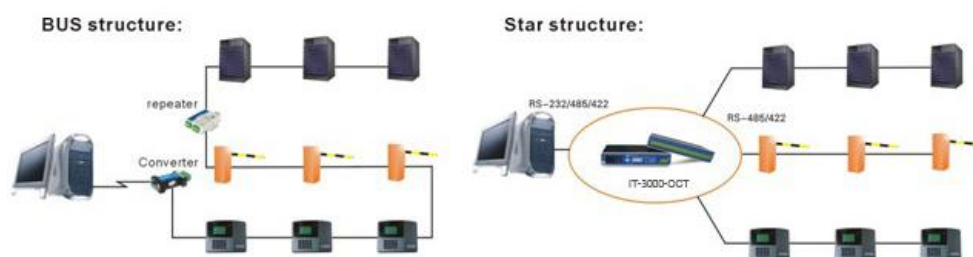
Octopus3 000 is provided with protection for short and open circuits at all ports. This type of design can ensure the isolation of problem

port if one of the port equipment is in failure so as to ensure the normal operation of other network sections.

Star-shape Connection

Owing to the unique design, IT-3000-OCT can provide users with RS-485/422 star-shape connection mode. This mode can change the

single structure of original bus into network structure to facilitate the engineering construction significantly.



Bus Division Concentration

IT-3000-OCT can easily optimize the system bus structure for respective handling of equipment of different functions or of different regions for the purpose constituting different independent

network sections without changing equipment itself. This cannot only improve the system stability but can also significantly shorten the system maintenance time.

Dimension



Specification

Standards: EIA RS-232C, RS-485, RS422 standard

RS-232 signal: TX, RX, GND

RS-422 signal: T+, T-, R+, R-, GND

RS-485 signal: D+, D-, GND

Working mode: Asynchronism, point to point, 2 wire half-duplex, 4 wire full duplex

Baud rate: 300~115200bps, auto test serial signal rate detect signal speed automatically, zero delay time

Flow control: Data direction auto-turnaround, no flow control is required

Transfer distance: RS-485/422 side: 1.8Km (9600bps)

RS-232 side: no less than 15m

Loading: Support 256 nodes loopback

Optical isolation: 3000V

Port protection: 600W surge protection, 15KV ESD protection

Connector: 5 bit terminal block

Power

Power input: 220VAC

Consumption: 5W

Environment

Operating temperature: -10°C to 60°C

Storage temperature: -40°C to 85°C

Humidity: 5% to 95% (no condensation)

Appearance

Dimensions: 227.0mm×146.0mm×43.0mm

Material: Plastic

Color: Black

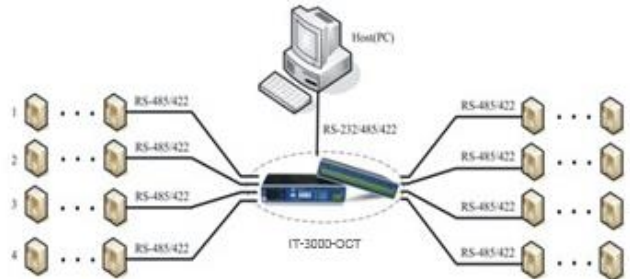
Weight: 1000g

Warranty: 3 years

Approvals: FCC, CE, RoHS approvals

Applications

IT-3000-OCT representative expert as follows:



1. Up Stream port

IT-3000-OCT has one UP Stream port, adopt 5 bit terminal block, be used to connect UP Stream equipment like as Host PC. According to users different require, You can choice RS-232, RS-485 or RS-422 Mold to connect main Equipment, the pin is defined in the products.

2. Down Stream port

IT-3000-OCT has right Down Stream port, adopt 5 bit terminal block, be used to connect Down Stream equipment like as Pos data collection equipment. According to users different require, You can choice RS-485 or RS-422 mode to connect Down Stream main equipment. The pin is defined in the products.

Packing List

1. IT-3000-OCT ×1
2. 220V power line ×1
3. User manual ×1