

KPS3101A/3102A/3204A/3208A

1, 2, 4, 8 serial ports DIN-rail serial device servers



» Overview

Kyland KPS310XA&320XA Serial Server is an industrial serial server based on Linux system architecture and ARM9 processor. It is mainly used to connect serial port equipment to Ethernet, the serial port data can be read through the network and the serial port device can be remotely controlled. Kyland KPS Serial Server not only supports TCP client, TCP server and UDP network communication modes, but also supports transparent transmission and Modbus RTU data transmission protocol.

Kyland KPS KPS310XA&320XA Serial Server can be divided into two serial port communication modes: RS-232 and RS-485. RS-485 serial port server provides 120 Ω switchable terminal resistance to reduce signal reflection and effectively improve the stability and reliability of RS-485 serial port communication.

» Key Features

Provide 1 to 2 Ethernet interfaces and 1 to 8 RS-232 / RS-485 serial ports

Support socket operation mode, including TCP server, TCP client and UDP

Support transparent transmission mode and Modbus RTU data transmission protocol

2KV isolation protection for the serial port 1.5kV isolation protection for Ethernet ports

Support alarm function and resetfunction

IP40 protection class

Metal housing, wide temperature operation (- 40 °C ~ + 75 °C)

Specialized debugging and management tool KyCMT

Product Specifications

>Technical Specification

-Ethernet Interface

KPS3101A : 1

KPS3102A : 1

KPS3204A : 2

KPS3208A : 2

Speed: 10/100 Mbps, Auto MDI/MDIX

Connector: RJ45

-Serial Interface

PS3101A : 1

KPS3102A : 2

KPS3204A : 4

KPS3208A : 8

Serial Standard: RS-232, RS-485 optional

Connector: 2-pin terminal block

Isolation Protection: 2 kV (build-in)

DIP switch: enable / disable the 120 Ω terminal resistor of RS-485.

-Serial Communication Parameters

Operation mode : TCP Client, TCP Server, UDP

Baud rate : 4800bps ~ 115200bps

Data bit : 5、 6、 7、 8

Stop bit : 1、 2

Check digits : None、 Even、 Odd

-Route

Support static routing

-Security function

SSH

MAC address binding

User classification

-Equipment management

Web management (HTTP / HTTPS)

KyCMT (device search, IP address configuration and other functions)

ICMP

SNMP v2c

SNMP trap

ARP, DNS, DHCP Client

-Equipment maintenance function

Upgrading through web

FTP, TFTP and syslog

SMTP mail alert

Equipment alarm indicator

Automatic reconnection after disconnection

-Clock characteristics

Support NTPv4 client

-LED indicators

Reset LED: Reset

Power LED: Power

Run LED: Run

Alarm LED: Alarm

Tx/Rx LED: Serial port transmit /Receive data

Port LED : Link/Act

-Physical Characteristic

Enclosure: SECC electrolytic galvanized steel sheet

Protection class: IP40

Installation method: DIN rail and wall mounted

Dimension (mm):

KPS3101A : 123*90*30

KPS3102A : 123*90*30

KPS3204A : 150*92*30

KPS3208A : 177*100*44

-Power requirements

Input voltage: 24V DC (12-36vdc)

Access terminal: 2-core plug-in terminal

Reverse protection: Support

Overload protection: Support

Power failure alarm: Support

-Environmental feature

Operating temperature: -40°C ~ 75°C

Storage temperature: -40°C ~ 85°C

Ambient Relative humidity: 5 ~ 95%, no condensation

Heat dissipation mode: natural cooling

MTBF : >30000h

Warranty: 5 Years

-Industry standard

EMI

FCC CFR47 Part 15,

EN55022/CISPR22, ClassA

EMS

IEC61000-4-2(ESD) ±6kV (contact), ±8kV (air)

IEC61000-4-3(RS) 10V/m(80MHz ~ 2GHz)

IEC61000-4-4(EFT) Power Port: ±2kV; Data Port: ±1kV

IEC61000-4-5(Surge) Power Port: ±1kV/DM, ±2kV/CM; Data Port: ±1kV

IEC61000-4-6(CS) 10V(150kHz ~ 80MHz)

IEC61000-4-8 30A/m

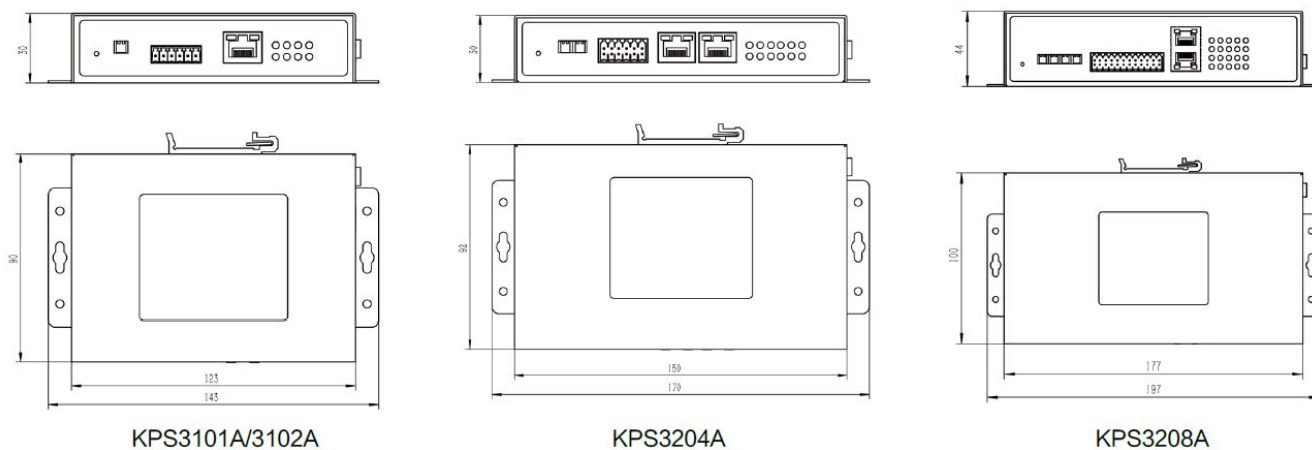
Machinery

IEC60068-2-6(vibration)

IEC60068-2-27(shock)

IEC60068-2-32 (free fall)

» Mechanical Drawing



» Ordering Information

Product Series	KPS3101A	KPS3102A	KPS3204A	KPS3208A
Ethernet Interface				
10/100BaseT(X) (RJ45 connector)	1	1	2	2
Isolation Protection	1.5kv (built-in)			
Serial Interface				
Connetor type	2-core plug-in terminal			
Port number	1	2	4	8
Serial port standard	RS-232或RS-485			
Operation mode	TCP Client, TCP Server, UDP			
Baud rate	4800bps ~ 115200bps			

Data bit	5、 6、 7、 8			
Stop bit	1、 2			
Check digits	None、 Even、 Odd			
Software feature				
Managment feature	HTTP/HTTPS , ICMP , SNMP , LLDP , ARP , DNS , DHCP, KyCMT			
Switch feature	Cascading function supported、 Support multiple network segment setting			
Maintenance	Upgrade by WEB , FTP , TFTP , Syslog , SMTP			
Security software	SSH , SSL , MAC binding , User management			
Transmission mode	Transparent mode/Modbus RTU			
Power				
Power supply	12~36 VDC			
Power consumption	0.9W	1W	1.5W	2W
Physical Characteristic				
Enclosure	Metal			
Dimension	123*90*30	123*90*30	150*92*30	177*100*44
Install	DIN rail and wall mounted			

KPS3101A-E-1T1D-232-L17

KPS3101A-E-1T1D-485-L17

KPS3102A-E-1T2D-232-L17

KPS3102A-E-1T2D-485-L17

KPS3204A-E-2T4D-232-L17

KPS3204A-E-2T4D-485-L17

KPS3208A-E-2T8D-232-L17

KPS3208A-E-2T8D-485-L17