

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 reset function
- IP40 protection class
- Metal housing, wide temperature operation (- 40 °C ~ + 75 °C)
- Specialized debugging and management tool KyCMT

Product Specifications

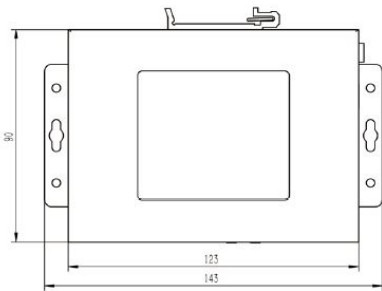
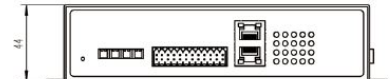
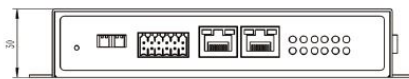
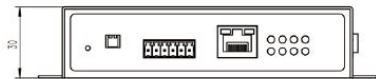
>Technical Specification

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

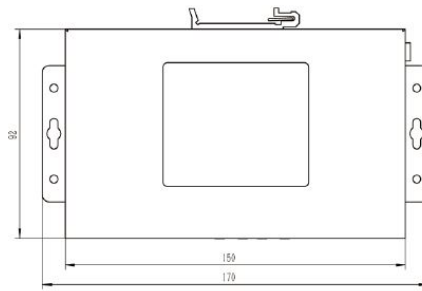
	SNMP trap ARP, DNS, DHCP Client
Equipment maintenance function	Upgrading through web FTP, TFTP and syslog SMTP mail alert Equipment alarm indicator Automatic reconnection after disconnection
Clock characteristics	Support NTPv4 client
LED indicators	Reset LED: Reset Power LED: Power Run LED: Run Alarm 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 (cont.), 300A/m (1s-3s)

	IEC61000-4-10 100A/m IEC61000-4-12 2kV/CM, 1kV/DM IEC61000-4-16 30V (cont.), 300V (1s) Machinery IEC60068-2-6(vibration) IEC60068-2-27(shock) IEC60068-2-32 (free fall)
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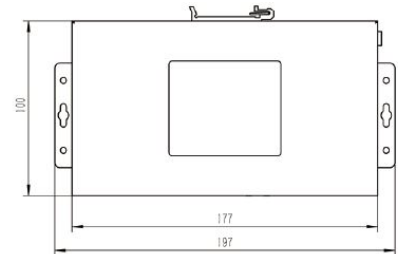
➤ Mechanical Drawing



KPS3101A/3102A



KPS3204A



KPS3208A

 **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				
Connector type	2-core plug-in terminal			
Port number	1	2	4	8
Serial port standard	RS-232 or 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				
Management 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			

Available Models

KPS3101A-E-1T1D-232-L17: 1-port Serial Device Servers

KPS3101A-E-1T1D-485-L17: 1-port Serial Device Servers

KPS3102A-E-1T2D-232-L17: 2-port Serial Device Servers

KPS3102A-E-1T2D-485-L17: 2-port Serial Device Servers

KPS3204A-E-2T4D-232-L17: 4-port Serial Device Servers

KPS3204A-E-2T4D-485-L17: 4-port Serial Device Servers

KPS3208A-E-2T8D-232-L17: 8-port Serial Device Servers

KPS3208A-E-2T8D-485-L17: 8-port Serial Device Servers

Version: 2022-05