NewPre2100 5G Edge Server with Software Defined Control



Strong Performance

 Use ARM 4-core Cortex-A53 processor, 1.6 GHz basic frequency, 2GB DDR4 memory and 8GB eMMC FLASH, to provide computing resources for many industrial-level field applications such as edge node data acquisition, protocol conversion, real-time control, agile connectivity, machine vision, intelligent applications, security and privacy protection

High Reliability Industrial Design

 Industrial no fan design, rail or wall mount, -40~75°C wide temperature operation, suitable for indoor and outdoor installation environment; meet the EMC 3 level, IP40 protection level

Multiple Access

- Support 3G/4G/5G multiple network modes, support WI-FI, support 1x10GBase-X, SFP+; 6x10/100/1000Base-T(X), RJ45 interface, support 2x485/432/422, support 2xCAN, support 2xDI, 2xDO, 2xAI
- Support rapid customization of multiple interfaces

Rapid Network Deployment

- It has rich intelligent communication interconnection function and supports static and dynamic routing protocols
- Support the establishment of dynamic VPN tunnels, easy to build a secure VPN network
- Support equipment management platform, efficiently manage a large number of remote devices with decentralized access

Security

- Support user graded certification security
- Support firewall function to protect network security
- Support multiple VPN encryption modes such as IPSec, Open VPN to ensure data transmission security

Convenient

 Equipment can be configured though local web and can be managed though cloud, easier to configure and deploy equipment

Multi-protocol Conversion

- Embedded rich industrial protocols, support Modbus TCP, Modbus RTU, CANopen, S7, PPI, EtherCAT, EtherNet/IP, Profinet, OPC UA, MQTT etc.
- Support custom protocols, support third-party extensions
- It can be dynamically loaded as required, free conversion

Business Integration

 Support software definition control to realize PLC control, data analysis, machine vision applications.

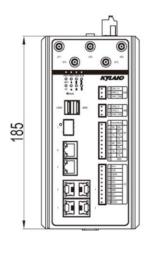
Specifications

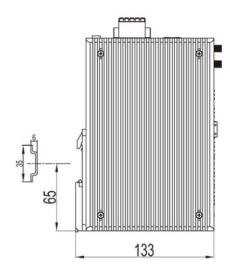
		NewPre2100-P521-M1-DO-W3	NewPre2100-P521-M1-DO-W0	
	CPU	4xCortex-A53, 1.6 GHz	h.	
Main System	Memory	2GBDDR4		
	Storage	8GBeMMC Support Micro SD extension, max support 128GB		
Interface	Network interface	1x10GBase-X, SFP+ interface; 6x10/100/1000Base-T(X), RJ45 interface		
	USB	2xUSB3.0		
	Serial port	2x485/422/232		
	CAN	2xCAN		
	10	2xAl, 2xDl, 2xDO		
	Console port	RJ45		
Power Supply	Input voltage	24DC(18-72VDC)		
	Terminal block	5-pin 5.08mm spacing plug-in terminal		
	Consumption	<25W		
	Overload protection	Support		
	Reverse protection	Support		
	Redundant protection	Support		
Mechanical Structure	Enclosure			
	Heat radiation	Natural cooling, no fan		
	IP class	IP40		
	Dimensions	94x185x123(WxHxD)		
	Mountng	DIN or wall mounting		
	Working temperature	-40 ~ 75°C		
Environment	Storage temperature	-40 ~ 85℃		
	Humidity	5 ~ 95% No condensation		
	EMI	FCC CFR47 Part 15, EN55022/CISPR22, Class A		
Standard	EMS	IEC61000-4-2(ESD), Air: ±8KV; Contact: ±6kV IEC61000-4-3(RS), 10V/m(80MHz ~ 2GHz) IEC61000-4-4(EFT), DC Power Port: ±2kV, Singal Port: ±2kV IEC61000-4-5(Surge), Power Port: ±1kV/DM,±2kV/CM, Singal Port: ±1kV(line to I ne), Singal Port: ±2kV(line to earth) IEC61000-4-6(CS), Signal ports: 0.15-80MHz at 10V/m, Power ports: 0.15-80MHz at 10V/m		
	Mechanical	IEC60068-2-6(vibration) IEC60068-2-27(impac	t) IEC60068-2-32(Free fall)	
5 G	Networking mode	SA, NSA	Do not support	
	Network standard	5G NR/LTE-FDD/LTE-TDD/WCDMA	Do not support	
	Frequency range	Sub-6Ghz, millimeter waves	Do not support	
	Antenna	SMA (outer thread inner hole), 4pcs	Do not support	
	SIM card	Double cards, drawer type card socket	Do not support	
WI-FI	Standard and Frequency	Support IEEE802.11b/g/n, 2.4G, and AP & Station mode, support IEEE802.11ac, 5.8G, and AP & Station mode	Do not support	
	Secure encryption	Support WEP, WPA and WPA2 etc.	Do not support	
	Transmitting power	26dBm(11b), 21.5dBm(11g), 20dBm(11n), 16dBm(11ac)	Do not support	
	Receiving sensitivity	<-72dBm@54Mpbs	Do not support	
	Antenna	SMA (outer thread inner hole), 1pc	Do not support	

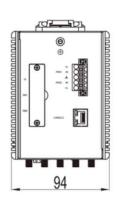
>> Order Information

Part Number	Description
NewPre2100-P521-M1-DO-W3-E7S222222-L2-L2	7 network ports, 2 232/485/422 ports, 2 CAN, 2DI, 2AI, support WIFI and 5G
NewPre2100-P521-M1-DO-W0-E7S222220-L2-L2	7 network ports, 2 232/485/422 ports, 2 CAN, 2DI, 2AI
NewPre2100-P521-M1-DO-W0-E4S220000-L2-L2	4 network ports, 2 232/485/422 ports, 2 CAN

Dimensions







KYC300 PLC Controller Module



Rich Resources

- Provide local DI, DO, AI, AO, high-speed pulse acquisition, PWM pulse output channels, provide 485 and Ethernet, support Modbus TCP/RTU and other common industrial communication protocols
- Motion control support. it integrates 12 pulse inputs and 4 pulse outputs to realize quickly equipment speed regulation, positioning functions

Extension Flexibility

 Data analysis: support real-time data acquisition, process and storage

Data storage: support distributed databases Analysis model: OEE analysis, performance analysis, energy consumption analysis, quality analysis, etc.

Efficient Programming

Pre-installed graphical control development platform MaVIEW,
 Support IEC61131-3, support C++, MatLab/Simulink

High Reliability

 Industrial grade design, suitable for the harsh environment, -40~75°C wide temperature operation, IP30 protection

Specifications

KYC300		
Computing	CPU	300MHz
	Storage	128MB
	Power down hold-up	8KB
Interface	Network port	2x10/100BASE-T, RJ45
	Serial port	1xRS485
	CAN	1xCAN
	Extension slot	Located the right side of the module, support Kyland KYIO module;
IO Interface	DI	12 channels, support 24VDC digital input and high-speed pulse input, can be configured by software. High-speed pulse support 6 channels: Up to support 200kHz, support single channel or orthogonal pulse mode, supportX1 or X4 counting mode.
	DO	6 channels 24VDC active output
	AI	4 channels, support 0~22mA, 0-5.12V, 0~10.24V, can be configured, channel accuracy $\pm 0.25\%$ (-40~75°C)
	AO	2 channels current output, 0~22mA; 2 channels voltage output, support+5V, +10V, +10.8V, ±5V, ±10V, ±10.8V; Channel accuracy ±0.25%@(-40~75°C)
	PO	4 channels, max output frequency 200kHz
	Local IO extension	Max10 modules