

KYLAND

Smart Control Solutions

Enabling Software Defined Control



SMART CONTROLLER

Smart Controller

NewPre3101/3102	03
NewPre200/300	06

Modular Controller & IO

NewPre3200	13
NewPre5100	16
KYIO-H Remote I/O	20
KYIO-L Remote I/O	23

Motion Controller (Codesys)

KYAC311	40
KYAC323	42

IoT Edge Controller

NewPre2100	45
NewPre2300	48

Power Automation Server

Hyperie8300	52
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Software:

Intewell Operating System	59
MaVIEW	61

IoT Edge Controller

NewPre2100 IoT Edge Controller



Robust Performance

- It uses a quad-core ARM Cortex-A53 processor with a 1.6GHz frequency, 2GB DDR4 memory, and 4GB eMMC. It provides computing resources for various industrial field applications, such as edge node data acquisition, protocol conversion, real-time control, agile connectivity, machine vision, intelligent applications, security, and privacy protection.

Highly Reliable Industrial Design

- Adopting an industrial-grade, fanless design and featuring a rail-type installation, it is capable of operating in a wide temperature range of -40 to 70°C, making it suitable for both indoor and outdoor installation environments. It is compliant with EMC standards and has an IP40 protection level.

Rich Industrial Protocols

- Supports multiple network modes, including 3G, 4G, and 5G, as well as Wi-Fi.
- Supports 2x RS485/232/422, 6x 10/100/1000Base-T(X) RJ45 interfaces, supports 2x CAN, supports 2x DI, 2x DO.
- Supports diverse, rapidly customizable interfaces.

Quick Network Deployment

- Equipped with intelligent communication and connectivity functions, it supports both static and dynamic routing protocols.
- Supports the establishment of dynamic VPN tunnels for easy and secure VPN network construction.
- Enables device management platforms for efficient administration of a large number of remotely connected devices.

Security

- Features a firewall that aids in network security protection.
- Supports multiple VPN encryption modes, such as IPSec and OpenVPN, to ensure secure data transmission.

Convenience

- The equipment supports local web configuration and cloud-based equipment management.

Multi-Protocol Conversion

- Comes with embedded rich industrial protocols, including Modbus TCP, Modbus RTU, CANopen, S7, PPI, CAN, Profinet, OPC UA, MQTT, among other commonly used industrial communication protocols.
- Supports custom protocols and third-party extensions.
- Allows for dynamic loading as needed for seamless protocol conversion.

Business Integration

- Supports software-defined control to realize PLC control, data analysis, and machine vision applications.

PRODUCT SPECIFICATIONS

		NewPre2100-N1043A-M1D6MW3	NewPre2100-N1043A-M1D6MW0
Main System	CPU	4x Cortex-A53,1.6 GHz	
	Memory	2GB DDR4	
	Storage	4GB eMMC	
Interface	Network Interface	6 x 10/100/1000Base-T(X),RJ45 In-terface	
	USB	2 x USB3.0	
	Serial Ports	2 x RS485/232/422	
	CAN	2 x CAN	
	IO	2 x DI/2 x DO	
	Console Debugging Port	RJ45	
Power Supply	Input Voltage	24VDC(18-72VDC)	
	Terminal Connection	5-pin 5.08mm pitch plug-in terminals	
	Power Consumption	<25W	
	Overload Protection	Supported	
	Reverse Polarity Protection	Supported	
	Redundancy Protection	Supported	
Mechanical Structure	Enclosure	Metal	
	Cooling Method	Passive cooling, fanless for the main unit, GPU fan cooling	
	Protection Level	IP40	
	Dimensions (mm)	94 x 185 x 123(W x H x D)	
	Mounting Method	Rail-mounting	
Environment	Operating Temperature	-40 ~ 70°C	
	Storage Temperature	-40 ~ 85°C	
	Relative Humidity	5 ~ 95% Non-condensing	
Standard	EMI	FCC CFR47 Part 15, EN55022/CISPR22, Class A	
	EMS	IEC 61000-4-2 (ESD), Air: ±8kV;Contact: ±6kV IEC 61000-4-3 (RS), 10V/m(80MHz ~ 2GHz) IEC 61000-4-4 (EFT), DC Power Port:±2kV/Singal Port:±2kV IEC 61000-4-5 (Surge), Power Port:±1kV/DM,±2kV/CM, Singal Port:±1kV (line to line),Singal Port:±2kV (line to earth) IEC 61000-4-6 (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 (Shock), IEC60068-2-32 (Free Fall)	
5G	Networking Modes	SA/NSA	Not supported
	Network Standards	5G NR/LTE-FDD/LTE-TDD/WCDMA	Not supported
	Frequency Bands	Sub-6Ghz, Millimeter Wave	Not supported
	Antenna	SMA Interface (external thread, internal hole), 4 pieces	Not supported
	SIM Card	Dual cards, drawer-type slots	Not supported
WI-FI	Standard and Frequency Bands	Supports IEEE802.11b/g/n, 2.4G, AP mode, Station mode. Supports IEEE802.11ac, 5.8G, AP mode, Station mode.	Not supported
	Security Encryption	Supports multiple encryption methods, including WEP, WPA, and WPA2.	Not supported
	Transmitting Power	26dBm(11b),21.5dBm(11g) 20dBm(11n),16dBm(11ac)	Not supported
	Reception Sensitivity	<-72dBm@54Mbps	Not supported
	Antenna	SMA Interface (external thread, internal hole), 1 piece	Not supported

ORDERING INFORMATION

Part Number	Description
NewPre2100-N1043A-M1D6MW3-0602C2A4DIO	6x10/100/1000BASE-T(X), 2x RS232/485/422, 2xCAN, 2xDI, 2xDO, 1xWIFI, 1x5G
NewPre2100-P521-M1-D0-WO-E6S222220-L2-L2	6x 10/100/1000BASE-T(X), 2x RS232/485/422, 2xCAN, 2xDI, 2xDO, 2xAI, 2x USB3.0
NewPre2100-P521-M1-D0-W5-E6S222220-L2-L2	6x10/100/1000BASE-T(X), 2xRS232/485/422, 2xCAN, 2xDI, 2xDO, 2xAI, 2xUSB3, 01x5G

DIMENSIONS

