KYLAND

NewPre 3000
ALL IN ONE of Edge Computing, Process Control, Machine Vision and Motion Control—Next Generation Industrial Server

›› Overview

NewPre Series, Kyland's next generation industrial server, is an all in one platform with edge computing, process control, motion control and machine vision. NewPre is pre-installed with Kyland Intewell OS which supports 20+ software defined real-time systems and desktop system by virtualization, Maview drag-and-drop graphical programming development suite, and edge connectivity applications.

NewPre is specially designed for harsh environments with wide operating temperature with high performance and compact size suitable for industrial applications.

›› Key Features

On-demand Flexibility: 20+ software defined real-time systems in one CPU to replace 20+ PLCs, isolated concurrent real-time and non-real-time system.

Real-Time: Minimum 50 us cycle time for mission critical control.

Open & Compatibility: Compatible with Windows / Linux based applications, protocol conversion of diversified protocols and MQTT or OPC-UA connection to clouds.

User Friendly: MaVIEW, Drag-and-drop graphical programming development suite, compliant with IEC61131 and IEC61499.

High Reliability: Industrial grade design for harsh environment, -40~75°C wide temperature operation, IP40 protection.

Innovative Bus Technology: AUTBUS, high performance broadband field bus over one pair of transmission line focus on deterministic transmission and compatible with Ethernet based IPv6 and TSN applications.

≫ Product Specifications

>Hardware specification
-Mechanical structure

Aluminum

-Size

140 x 170x80 (W x H x D) mm

-Mounting

DIN Rail

-CPU

Intel CORE i7-6822EQ

-Memory

16GB , DDR4 2113 MHz

-NOVRAM

2MB

-Harddisk

256GB,SSD

-Display interface

HDMI x 1

-Indicator

PWR1,PWR2,RUN,ERR

-USB

USB2.0*2,USB3.0*2

-Ethernet(Ring network)

2 x 100/1000BASE-T，RJ45

-Ethernet(I/O)

2 x 100/1000BASE-T，RJ45

-Ethernet(Redundancy)

2 x 100/1000BASE-T，RJ45

-CAN

1 x CAN

-Serial port

1 x RS232，1 x RS485

-AUTBUS

4 x AUTBUS(Extension module)

-Extension

PCIe x 1

-Protection level

IP40

-Cooling

fanless

-Operation temperature

-20~60℃
-40-75°C(wide temperature model)

-Storage temperature

-40~85℃

-Power supply

24VDC（18~36VDC）

-power supply redundancy

Support

-Power consumption

<50W

>Software specification
-Intewell OS with real-time virtualization

Pre-installed Intewell operation system.

Supports 20 software-defined high real-time control kernels, with 2us event response time, minimum 50 us cycle time.

Supports up to 10 real-time control kernels share one physical core.

Supports memory isolation and hard disk isolation between real time control kernel and desktop system.

Supports Ethernet virtulization.

Integrates KySDC software for control kernel distribution and definition.

Supports life cycle management for virtual system, including create, configure, deploy, delete, run, stop, restart, hibernate, hang, restore and rebuild.

-Control Platform

Integrates programming development suite MaVIEW, which supports IEC61131-3, supports graphical programming mode, integrates HMI configuration, database configuration and PLC algorithm configuration.

Integrates KyOPS operation station HMI, integrates IO SERVER and RT database.

-Edge computing capability

Integrates KyGate for gateway application, supporting Modbus-TCP, Modbus-RTU, S7-TCP, S7-PPI and other protocols, MQTT and OPC-UA connectivity to cloud.

≫ Mechanical Drawing

≫ Ordering Information

www.kyland.com

Alcom
electronics

Singel 3 | B-2550 Kontich | Belgium | Tel. +32 (0)3 458 30 33 | info@alcom.be | www.alcom.be
Rivium 1e straat 52 | 2909 LE Capelle aan den Ijssel | The Netherlands | Tel. +31 (0)10 288 25 00 | info@alcom.nl | www.alcom.nl