

# Kyland Hyperie 8300

## Next Generation Power Server

Make substation more Real-time, more Powerful, more Reliable and more Cost Effective



Kyland's Hyperie 8300 is a power automation platform, equipped with various data interfaces, built-in hundreds of protocols, integrated soft-PLC control functions and SCADA/HMI functionality, pre-installed Intewell Hypervisor for real-time virtualization, open platform for customized APPs, making it an ideal solution for automation system of transmission/distribution substation, distributed PV power generation, wind power, thermal energy storage, etc.

### Key Features:

#### Data Collection and Concentration

- Multi-kinds of interfaces for extension connectivity: Ethernet copper and fiber port, serial port, DI/DO, IRIG-B, HDMI, VGA, USB
- Multi-protocol IEDs data acquisition, processing, storage; multi-protocol conversion, data forwarding and breakpoint continuation transfer
- Built-in hundreds of protocols for communication with various substation devices, compliant with the majority protocols within substation automation, such as IEC61850 Server/Client, IEC60870-5-101/103/104, DNP3.0, Modbus TCP/RTU, SEL faster, ABB Spabus, Alstom Courier, etc.

#### Control Platform

- Integrates Drag-and-drop graphical programming development suite
- Compliance with IEC61131 programming standard and support the IEC61131-3 programming language of ST, FDB, LD
- Support C++, MatLab/Simulink programming Alstom Courier, etc.

#### Powerful SCADA/HMI Functionality

- Collect the operation status, communication status, operating parameters, failure report and other information of system devices
- Monitoring the operation status and fixed value data of the primary and secondary system, protection device and fault recorder in a friendly and visually way
- Support professional and practical HMI development tool and provide comprehensive and professional graphics, reports, curves/charts, statistical analysis and event alarm/ recording for power applications
- Alarm information management and alarm classification assist operator in alarm event location
- User permission management functions, capable of setting user groups and access right by region, restricting the operation of protection devices in operators, restricting the access right of system devices etc.

Product details:

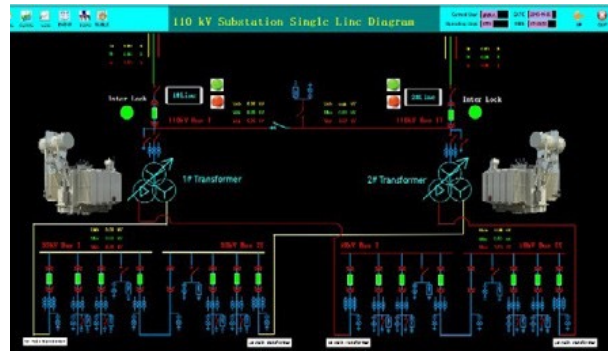


[www.klgsmartec.com/product/hyperie8300/](http://www.klgsmartec.com/product/hyperie8300/)

E [info@klgsmartec.com](mailto:info@klgsmartec.com)

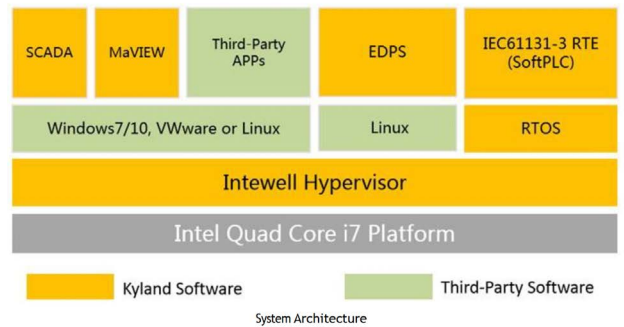
### Pre-install Intewell Hypervisor with real-time virtualization

- Quad Core Intel i7 processor platform provides powerful and flexible computing ability to support real-time applications
- Virtualize up to 20 software-defined RTOS on a single CPU platform, allowing simultaneous operation of real time OS and Non-real time OS with isolation
- Install Windows/Linux on virtualized core, compatible with Windows and Linux-based APPs

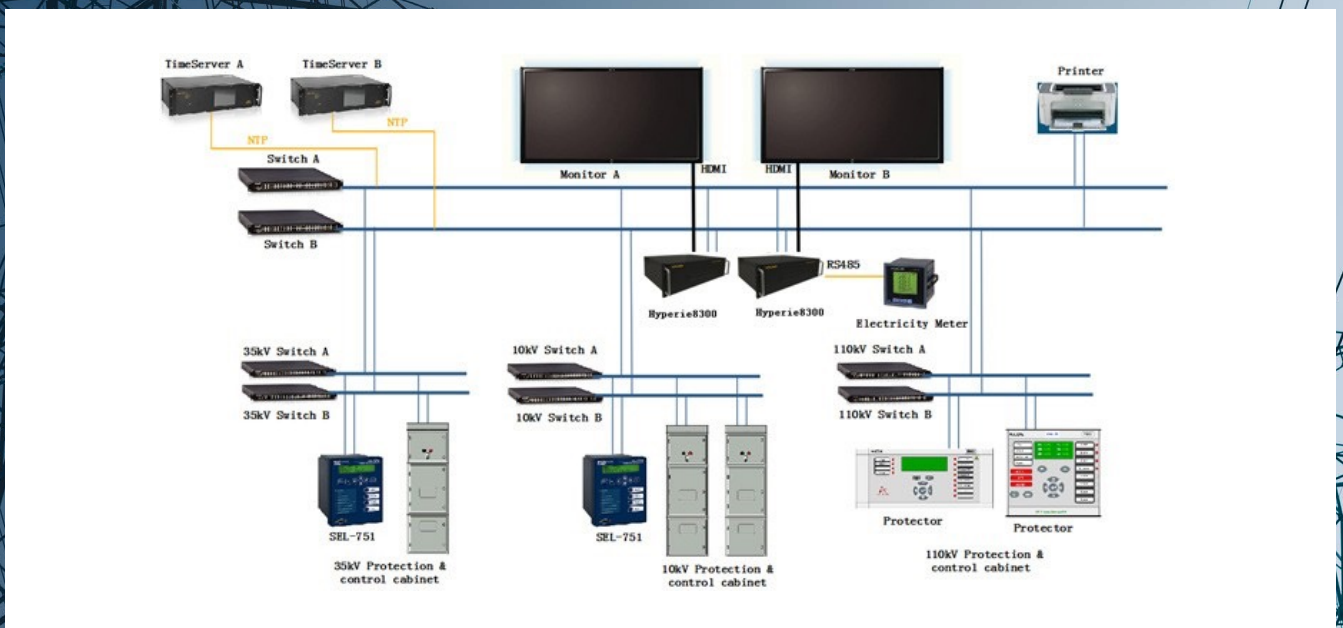


### Industry Grade Design for Harsh Environment

- Fanless design and -40°C to +75°C operating temperature for harsh environments
- Compliant with IEC61850-3 and IEEE 1613 for power automation system
- Wide power input range: 110-220V AC / DC, redundant power supplies



### Substation Automation Diagram



## Product Specification

Hyperie8300		
<b>Processor, Memory and Storage</b>	<b>CPU</b>	Intel® Core™ i7, i5, Celeron Optional
	<b>RAM</b>	8GB/Max 64GB DDR4 SODIMM
	<b>Storage Slot</b>	2.5" SSD slots x 2
<b>Interface</b>	<b>Ethernet Ports</b>	6 x 10/100/1000Base-T(X) RJ45 ports, 2 x Gigabit SFP slots for fiber SFP module
	<b>Serial Ports</b>	8 x RS232/RS485 ports, DB9/terminal connector, 2.5KV isolation and 2KV surge protection
	<b>DIDO</b>	4 x DI, 4 x DO
	<b>IRIG-B</b>	1 x IRIG-B IN, 1 x IRIG-B OUT
	<b>Console</b>	RS232, DB9
	<b>Alarm Contact</b>	2 x programmable normally close (NC) dry contact outputs for system failure alarm, 2 x power loss alarm contacts
	<b>USB</b>	2 x USB2.0 (front), 5 x USB3.0 (rear)
	<b>Display</b>	1 x VGA, 2 x HDMI
<b>Expansion Slot</b>	3 expansion slots for optional Ethernet RJ45/ fiber port, DIDO and serial port modules	
<b>LED</b>	<b>System</b>	Run: RUN, Power: PWRI, PWR2 Alarm: ALM1, ALM2
	<b>Programmable LED</b>	1-8
	<b>LAN</b>	2 per RJ45/SFP port (LINK, ACT)
	<b>Serial</b>	2 per port (TXD, RXD)
	<b>DIDO</b>	1 per port
<b>Power Supply</b>	<b>Input Range</b>	110-220 VAC/DC redundant power supplies
	<b>Power Button</b>	ON/OFF
	<b>Power Loss Alarm</b>	Support
	<b>Power Consumption</b>	Max 50W
<b>Physical Characteristics</b>	<b>Housing</b>	Metal, fanless
	<b>Dimension</b>	483mm x 133mm x 330mm
	<b>Weight</b>	9kg
	<b>Mounting</b>	19 inch Rack mounting
<b>Environmental Limits</b>	<b>Operating Temperature</b>	-40°C to +75°C
	<b>Storage Temperature</b>	-40°C to +85°C
	<b>Ambient Relative Humidity</b>	5% to 95% (non-condensing)
<b>Protocol</b>	<b>Server</b>	IEC 61850-8-1 Server (MMS/GOOSE) IEC 60870-5-101, IEC 60870-5-103, IEC 60870-5-104, DNP 3.0 Serial and LAN/WAN Modbus RTU and TCP/IP, Multi-Vender Meter protocol CDT
	<b>Client</b>	IEC 61850-8-1 Client (MMS/GOOSE) Courier SEL Fast Meter IEC 60870-5-101 IEC 60870-5-103, IEC 60870-5-104 DNP 3.0 Serial and LAN/WAN Modbus RTU and TCP/IP, Multi-Vender Meter protocol CDT
<b>Standards</b>	IEC61850-3 and IEEE1613	
<b>Warranty</b>	2 year	

## Ordering Information

Main Model	Storage 1	Storage 2	Extention Slot 1	Extention Slot 2	Extention Slot 3	Operating System & Application
<b>Hyperie8300-C7-M2-DB-H</b>	HYM-128-TLC	HYM-128-TLC	HYM-8D-232/485	HYM-HSR/PRP-GE	HYM-MultiOts	HYM-WO
Main Model P/N Scheme						
Hyperie8300	C7	M2	DB9	H		
<b>Model:</b> Hyperie8300	<b>CPU:</b> C1: Celeron®4305UE C5: i5-8365UE C7: i7-8665UE	<b>Memory:</b> M1 : 8G M2 : 16G M3 : 32G M4 : 64G	<b>Integrated DB9 Serial Port Modular:</b> 00 : non DB : 8 x DB9 based serial port	<b>Power Supply:</b> 0: Dual fixed HV power supply, none hot-swappable H: Dual Hot-Swappable HV power supply		

### Expansion Module (Support up to 3 Modules)

Main Model	Description
<b>HYM-8D-232/485</b>	Serial port module with 8 x RS232/485 serial ports, terminal connectors
<b>HYM-8DI8DO</b>	DI/DO module with 8 x DI and 8 x DO
<b>HYM-2GX</b>	Ethernet port module with 2 x 1000Base-X SFP slots
<b>HYM-6GE</b>	Ethernet port module with 6 x 10/100/1000Base-T(X) RJ45 ports
<b>HYM-HSR/PRP-GE</b>	PRP/HSR Module-2X10/100/1000Base-T(X) RJ45 ports
<b>HYM-HSR/PRP-GX</b>	PRP/HSR Module-2 X 1000Base-X, 100Base-FX SFP
<b>HYM-MultiOts</b>	2*SFP ports + 4*DIDO + 2*ALM contacts + 1*IRIG-B Input/Output+ 2*USB2.0/3.0

### Storage

Model	Description
<b>128GB SSD</b>	128GB TLC/MLC SSD
<b>256GB SSD</b>	256GB TLC/MLC SSD
<b>512GB SSD</b>	512GB TLC/MLC SSD
<b>1TB SSD</b>	1TB TLC/MLC SSD

### Operating System + Application

Model	Description
<b>HYM-WO</b>	Windows 10 IOT 2019 LTSC
<b>HYM-LG</b>	Centos 7 + EDPS Protocol Gateway Support IEC61870-5-101/103/104,DNP3.0, Modbus,IEC61850 client/server
<b>HYM-VW(specify for i7 platform)</b>	Intewell Virtualization platform <Windows 10 IOT 2019 LTSC> <CentOS + EDPS Protocol Gateway> <RTOS with MaVIEW IEC61131-3 SoftPLC>

