IoT Products series

Cloud Gateway

Ethernet IO Gateway

- EZG1000 — EAZInet Gateway
- EZG1200 — Microsoft Azure Gateway
- EZG1300 — MQTT Gateway

DevicePort Remote I/O Module(DIO/AIO)

AI model	DIO model	Industrial	Serial model	AI model	DIO model	Combo model
EZR5231 4-port AI	EZR5002 2-port DI 4-port DO		EZISNNN40 4-port COM	EZIAINN80 8-port AI	EZIDIDFF 32-port DI	EZIAIDI8F 8-port AI 16-port DI
	EZR5003 3-port DI 3-port DO		EZISNSN44 8-port COM		EZIDCNN80 8-port DI 8-port DO	EZIAIDC88 8-port AI 8-port DI 8-port DO
	EZR5004 4-port DI 2-port DO				EZIDIDOFF 16-port DI 16-port DO	

DevicePort Remote I/O Module (RS-232/422/485)

- DPA301HTP — 1-port RS-232/422/485
- DPAD02HTP — 2-port RS-422/485
- DPAS01D00 — 1-port RS-232
- DPAS02H00 — 2-port RS-232
- DPAS04H00 — 4-port RS-232
- DPAS08H00 — 8-port RS-232

PCIe Expansion Card

RS-232
- M2S6437A — 2-port RS-232 M.2 PCIe Card (Type-2242)

RS-422/485
- M2S6456A — 4-port RS-232 M.2 PCIe Card (Type-2242)
- IPC-M2202S — Industrial 2-port RS-422/485 M.2 PCIe Card w/Surge (Type-2280)
- IPC-M2204S — Industrial 4-port RS-422/485 M.2 PCIe Card w/Surge (Type-2280)

DI/DO
- IPC-M344I — 4-Ch Digital in 4-Ch Digital Out Industrial Isolated M.2 Card

Industrial
- SDC0880I — 8-Ch Digital In 8-Ch Digital Out Industrial PCIe Card
- SDC4880B — 2-port internal RS232/422/485 2-port external RS232/488/485 8-Ch Digital In 8-Ch Digital Out Industrial PCIe Card
- SDC0FF0I — 16-Ch Digital in 16-Ch Digital Out Industrial Isolated PCIe Card

Serial Device Server

Commercial version

2-port	4-port	8-port	
IDSX02DW0 RS-232	IDSX04DW0 RS-232	IDSX08DW0 RS-232	CDSS02D00 RS-232
IDSD02DW0 RS-422/485	IDSD04DW0 RS-422/485	IDSD08DW0 RS-422/485	CDSX02D00 High Speed RS-232 2-port
IDS302DW0 RS-232/422/485	IDS304DW0 RS-232/422/485	IDS308DW0 RS-232/422/485	
IDS302DWS RS-232/422/485 w/ Surge & Isolation	IDS304DWS RS-232/422/485 w/ Surge & Isolation	IDS308DWS RS-232/422/485 w/ Surge & Isolation	

ECS Application Kits

Intelligent ToT

Smart Meter Monitoring

Environmental Monitoring

Machine Operation Rate

Electronic Fense
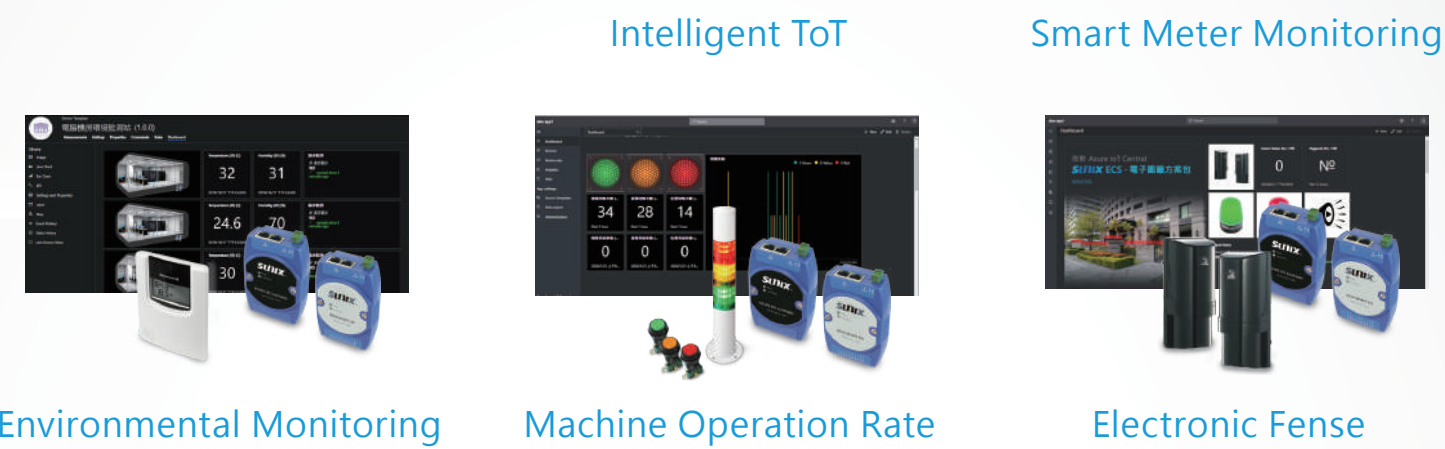
SUNIX ECS (EAZInet & IoT Central Solution) Starter kit simplify retrieving data from sensors and devices in the cloud, enabling workers and managers to monitor equipment. This type of equipment monitoring can be catered to the needs of a company (e.g. energy and environmental monitoring). It's compliant with any interface of sensors. Setting up SUNIX IoT Central Starter kit only takes a few simple steps. It's available for an extremely low monthly leasing fee, eliminating the cost associated with procurement and maintaining server hosts.

Non-invasive transformation
Safely obtaining data without breaking into machine.

Simplify personnel operation
Fully control without additional operation mechanisms.

No programing experience needed
SUNIX integrates with Microsoft Azure IoT Central, bring out brand new experience in device control.

Microsoft Azure IoT Central
Data event log, Dashboard display, Big data analysis, Graphical report, and many more available services.

SUNIX
EAZInet®-ting device data to cloud

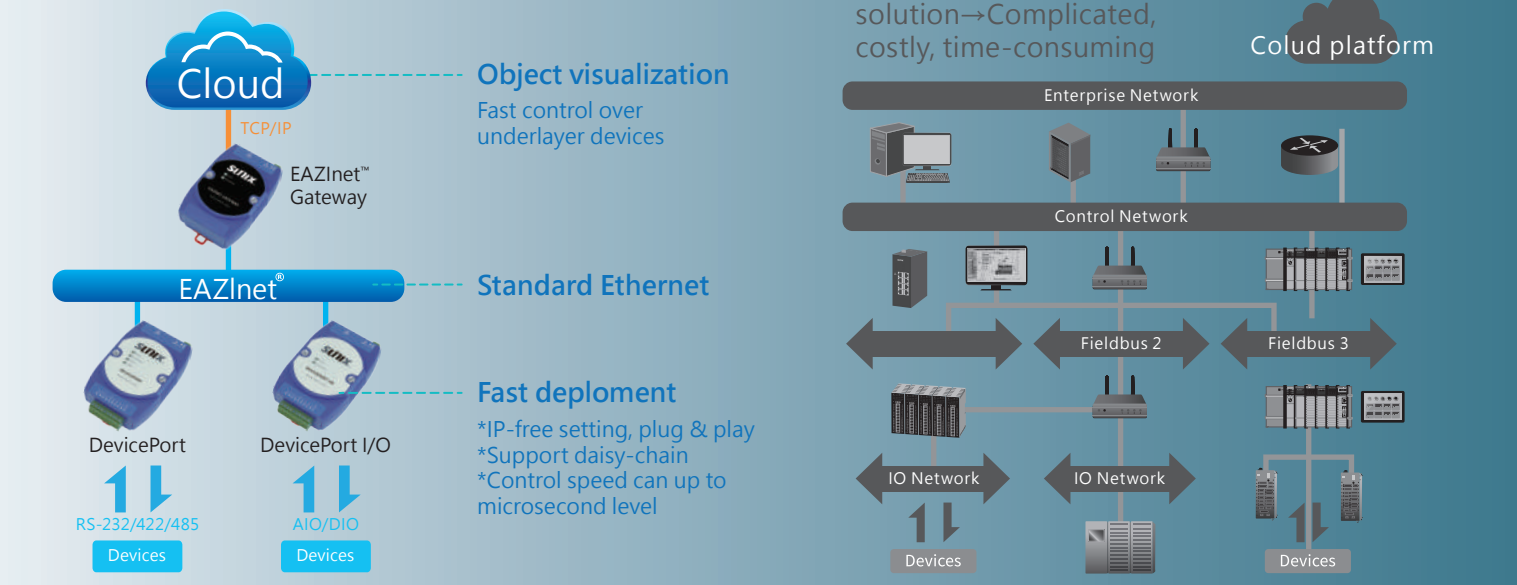Google Cloud · IBM Cloud · Alibaba Cloud · aws · Azure

SUNIX EAZInet®-patented Communication Technology

The transmission architecture of EAZInet underlayer is build upon high efficient Ethernet, flexible and innovative I/O expansion technology. It provides a brand-new way to I/O expansion, in which underlayer equipments get online through "plug & connect" without any IP address setting and management. Users can easily upload data from underlayer equipments to cloud through standard network protocol.
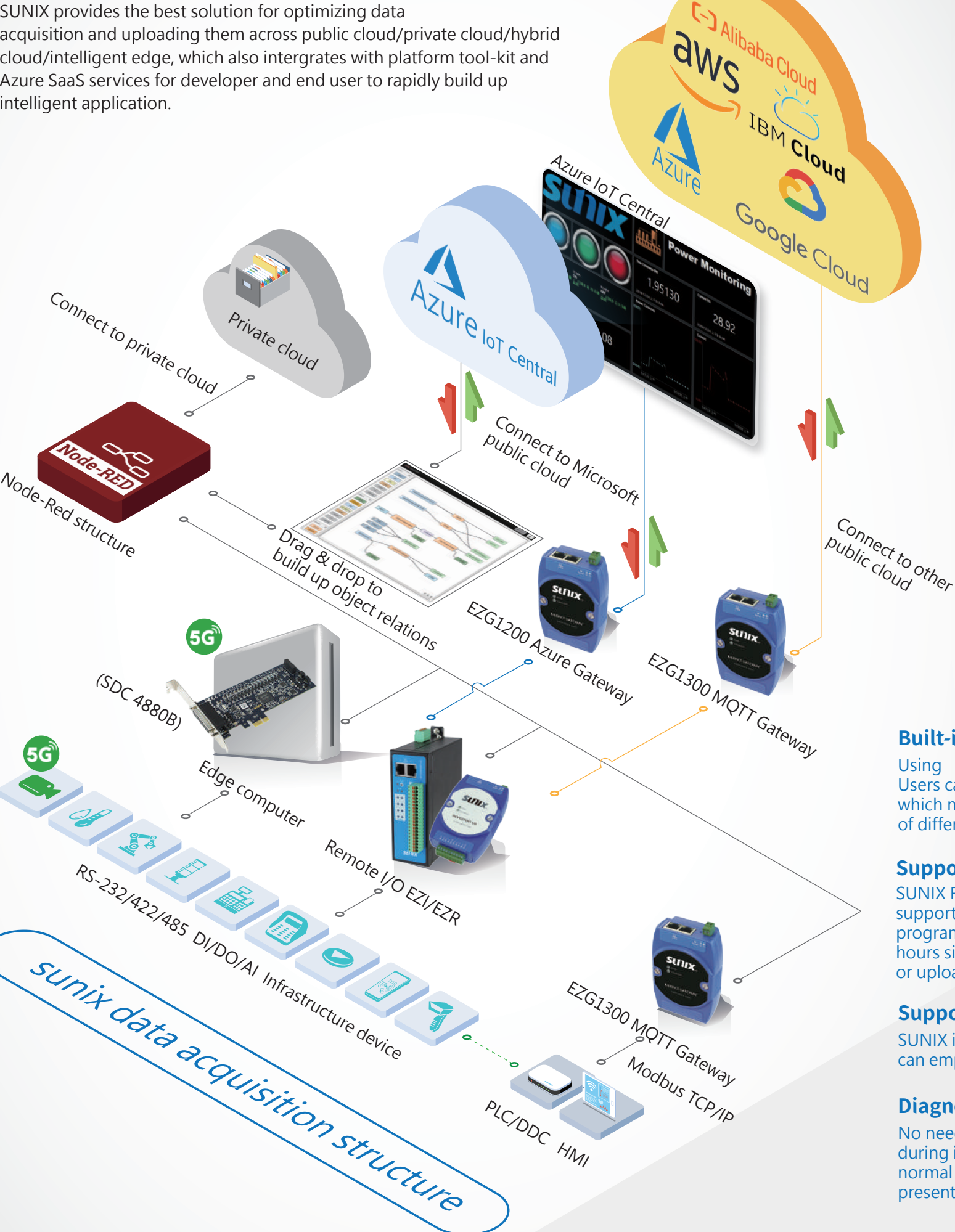
EAZInet-patented technology supports the functions of automatic numeration and data visualization, which helps platform developers easily identify connected equipments, rapidly deploy and control end devices in order to perform the tasks of data acquisition and analysis for application development.
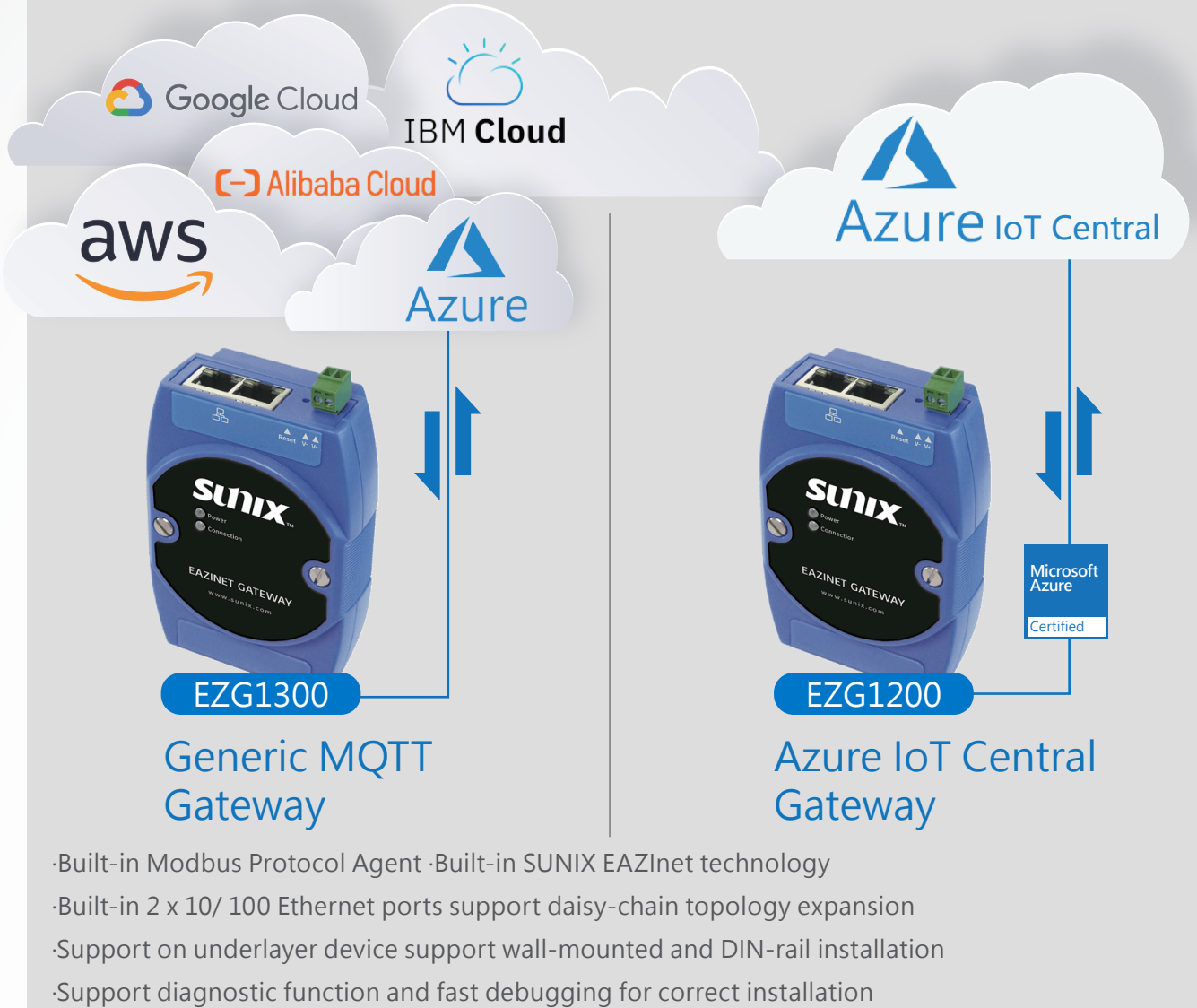
Application Layer

Smart factory | Smart building | Smart medical | Smart retail

Platform Layer

Cloud | Azure | IBM Cloud | aws | Alibaba Cloud | Google Cloud

Communication Layer

EAZInet®

Fast & Flexible Deployment	Standard Ethernet Protocol	Object-oriented/ Enumeration
*IP-free setting, plug & play *Support complete network topology *Single solution for different devices	*Standard Ethernet network packet transmission *Proactive Event Based Mode instead of old polling mechanism *No need to convert different communication protocol layer by layer	*Auto-acquisition on device and data *WYSIWYG for platform developer *Rapid and direct control over underlayer devices

Physical/ Perception layer

Smart building | Smart factory | Smart home | Smart business | Smart mesurement | PLC | Sensor

EAZInet® and Traditional Network

Cloud

TCP/IP

EAZInet™ Gateway

EAZInet®

DevicePort | DevicePort I/O

RS-232/422/485 | AIO/DIO

Devices | Devices

Object visualization
Fast control over underlayer devices

Standard Ethernet

Fast deploment
*IP-free setting, plug & play
*Support daisy-chain
*Control speed can up to microsecond level

Traditional solution→Complicated, costly, time-consuming

Colud platform

Enterprise Network

Control Network

Fieldbus 2 | Fieldbus 3

IO Network | IO Network

Devices | Devices

SUNIX Data acquisition architecture

SUNIX provides the best solution for optimizing data acquisition and uploading them across public cloud/private cloud/hybrid cloud/intelligent edge, which also intergates with platform tool-kit and Azure SaaS services for developer and end user to rapidly build up intelligent application.

Alibaba Cloud | aws | IBM Cloud | Azure | Google Cloud

Azure IoT Central

Power Monitoring

Private cloud

Connect to private cloud

Connect to Microsoft public cloud

Connect to other public cloud

Node-RED

Node-Red structure

Drag & drop to build up object relations

EZG1200 Azure Gateway

EZG1300 MQTT Gateway

5G

(SDC 4880B)

5G

Edge computer

Remote I/O EZI/EZR

RS-232/A22/485 DI/DO/AI Infrastructure device

EZG1300 MQTT Gateway

Modbus TCP/IP

PLC/DDC HMI

sunix data acquisition structure

The best cloud gateway
Support all device data uploading to cloud

Google Cloud | IBM Cloud | Alibaba Cloud | aws | Azure | Azure IoT Central

EZG1300 | EZG1200

Microsoft Azure Certified

Generic MQTT Gateway | **Azure IoT Central Gateway**

·Built-in Modbus Protocol Agent ·Built-in SUNIX EAZInet technology
·Built-in 2 x 10/ 100 Ethernet ports support daisy-chain topology expansion
·Support on underlayer device support wall-mounted and DIN-rail installation
·Support diagnostic function and fast debugging for correct installation

Built-in Modbus Protocol Agent

Using "Agent" to acquire Modbus data and translate it into MQTT cloud Protocol. Users can also set the device parameters of Modbus and Analog-in by themselves, which means that users can integrate their existing devices or choose various sensors of different brands in cost effective way.

Support Node-RED software platform

SUNIX Remote I/O（EZI/EZR series）and intelligent I/O card（SDC series）support mainstream IO software platform of NODE-RED which requires no programming efforts. Users can build up digital dashboard within a few hours simply through drag & drop objects while storing information locally or uploading to Azure cloud simultaneously.

Support Edge-X advanced development

SUNIX intelligent I/O card and Remote I/O series both support Edge-X, users can employ Go language to rapidly build up intelligent IoT platform.

Diagnostic - intelligent debugging

No need on using extra tool. Users can rapidly identify and rule out problem during installation as soon as logging into Web-based manager to ensure normal communication among underlayer devices and correct information presenting on cloud digital dashboard.

Simple 4 steps

1 Device connection
Ethernet I/O module
(UART · DIO · AIO)

2 Interface setting
Reading sensors' information status
(Modbus · String · Float · Int)

3 Service setting
Activiating Microsoft Azure IoT Central services

4 Console setting
Arranging Azure IoT Central graphic interface