■ Ignition: The New SCADA

Ignition SCADA by Inductive Automation® combines an unlimited licensing model, with instant web-based deployment, and the industry-leading toolset for supervisory control and data acquisition (SCADA) — all on one open and scalable universal platform. Ignition is The New SCADA because it solves all the major pain points of old SCADA . Ignition empowers your business to easily control your processes, and track, display, and analyze all your data, without limits.

Ignition!
ONBOARD

■ Ignition + ORing IIOT Solutions Overview

Ignition scada Central Gateway Ignition

Ignition Client

Small scale factory
IgnitionEDGE
Ignition Client
IGMG-P83244GC+-D4G
PLC
☁ MQTT Sparkplug

ORing MagiCITY
IIOT
ORing-PaaS-Cloud

Smart streetlight
☁ MQTT-Sparkplug

Process, Energy
IgnitionEDGE
Ignition Client
IGMG-P83244GC+-D4G

Weather station
IMG-4312-MN

CAT-M1 LTE NB-IOT

WHAT CAN ORing DO FOR YOU ?

1 vertical market/ Project requirement
6 Technical Support Services
2 Product Selection
5 Field Site Test
3 Field Site Survey
4 Product Installation

100% Solution
★★★★
ORing

New generation intelligent gateway
ORing Industry 4.0 Solutions
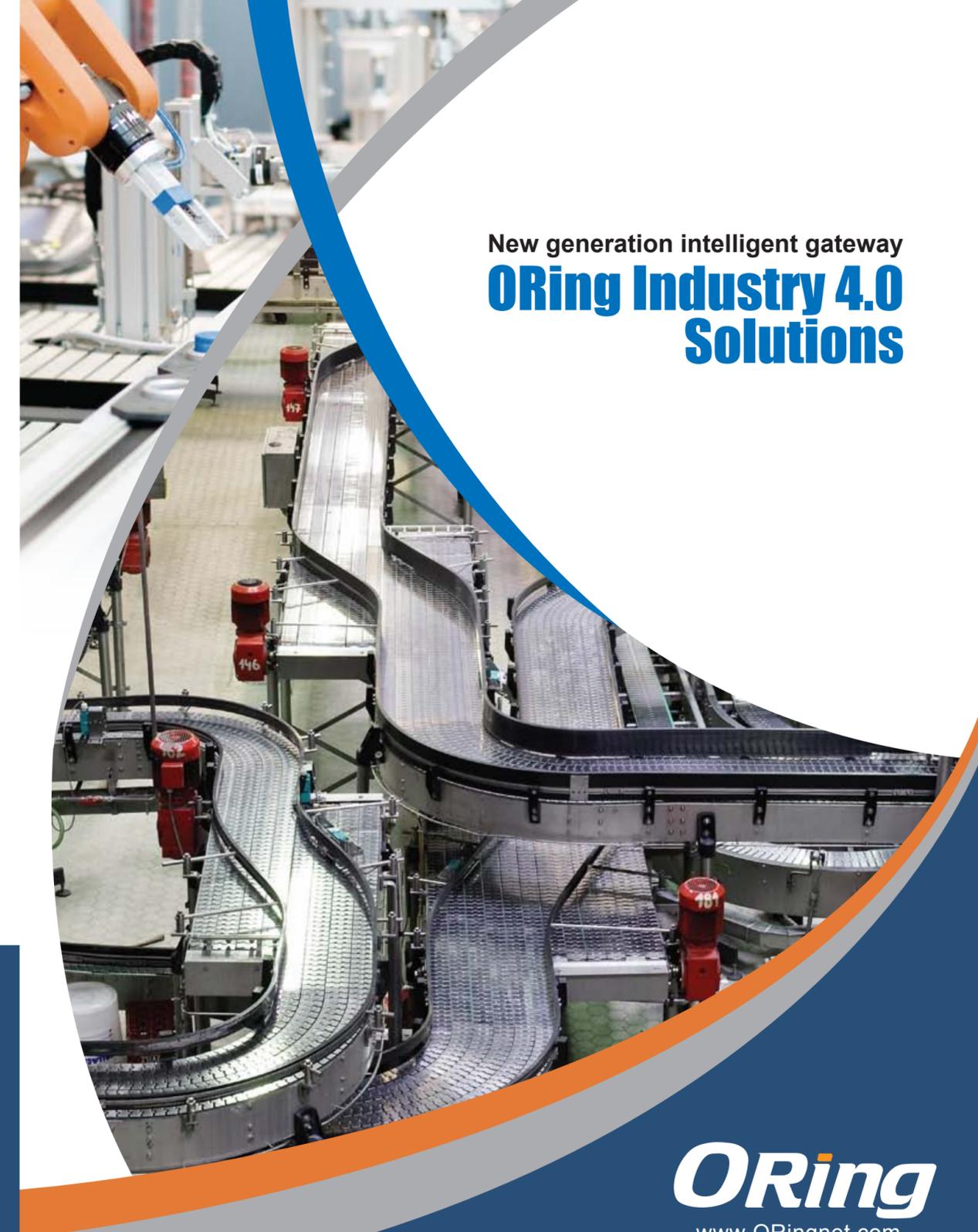
ORing
www.ORingnet.com

## ▶ Why do you need Industry 4.0

Given the huge opportunity and benefit brought by Industry 4.0, manufacturers are in desperate need of enhancing their factory operations. They need to transform traditional factories into smart factories featuring higher efficiency and lower costs, production and management wise.

However, deploying new technologies is usually time- and cost-consuming. Many manufacturers are deterred by the deployment complexity and costs because they have to either purchase new equipment and systems or ask system Integrators to integrate their .

With a clear understanding of customers' pain points, ORing has launched new solutions in collaboration with Inductive Automation to help customers move into Industry 4.0 ahead of others.

■ IGMG-P83244GC+-D4G Application

Networking Devices

PLC and I/O
(Weidmüller, Seimens, Allen-Bradley, Omron, Mitsubishi, Schneider)

IOT Gateway
(IGMG-P83244GC+-D4G)
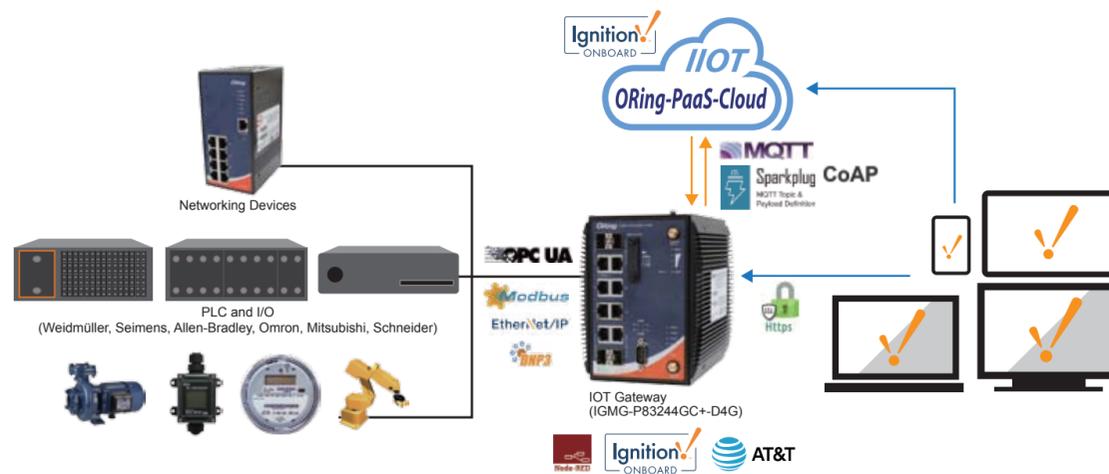
■ Ignition Architectures

Remote Field Devices
PLCs
Edge Gateway
Gateway
PLCs
MQTT Enabled Device
Clients
Database
Remote Field SCADA
Internet/Cloud Server

Local Devices
Data Logging Boxes
PLCs
MQTT Connections
Database
PLCs
Gateway
Clients
Local Site SCADA

Central Ignition Gateway
Central Site SCADA
Database

Web-Launched Ignition Clients
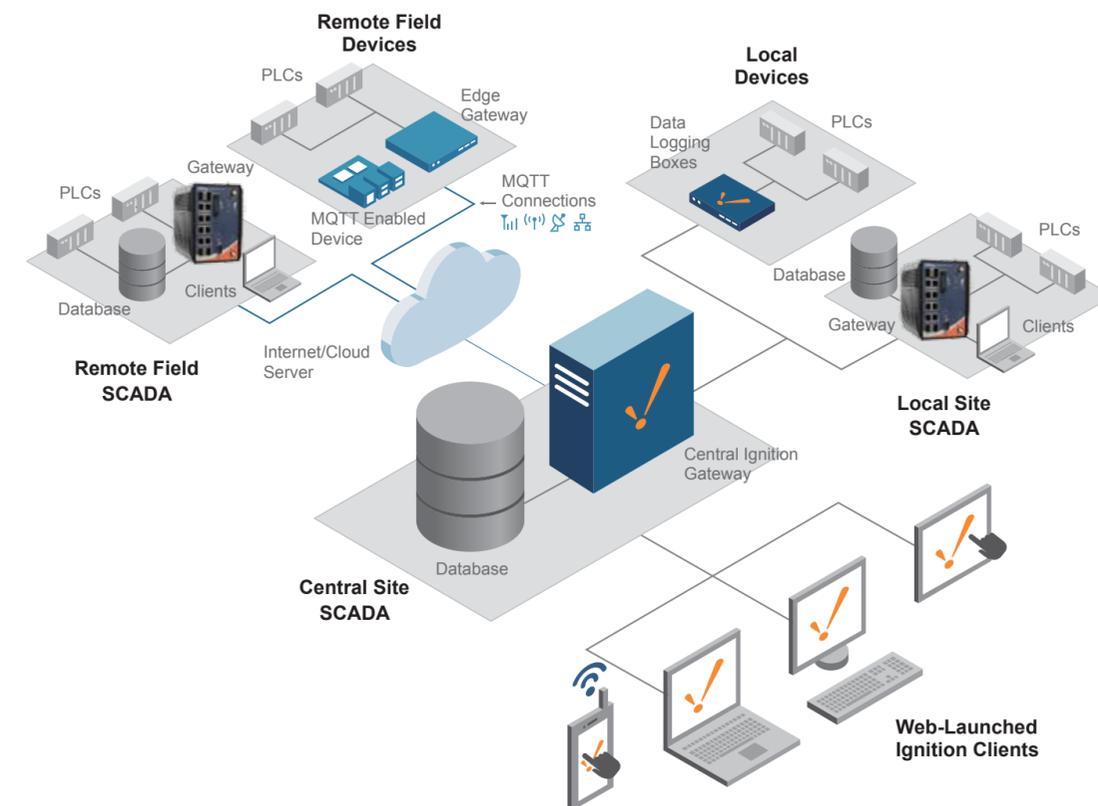
■ New Generation Intelligent Product

IGMG-P83244GC+-D4G
- Support redundant/load-balanced 4G LTE connection certificated by AT&T®
- Inductive Automation Ignition/Ignition Edge on board – powerful, web-deployed industrial application platform for HMI, SCADA, MES and IIoT with MQTT connections
- Support MQTT/Sparkplug B and CoAP IoT protocols
- Support 64GB SSD storage for data logging (128/256GB option)
- Node-RED on board for data flow design and rapid prototyping

IMG-4312+-4G/MN
- Support LTE-M (CAT-M1)/NB-IoT (CAT-NB1) and single mini SIM card slot (*MN model)
- Support LTE Cat. 4 and single mini SIM card slot (*4G model)
- Support ORing Open Gateway (protocol converter) software feature for user-friendly IIoT deployment
- Support ORing Cloud Wizard feature for easy and quick step-by-step device provisioning
- Support VPN for secured network connection (OpenVPN, PPTP, IPSec)

IGPS-9080
- Fully managed Https/SSH/SNMP
- 8x10/100/1000Base-T(X) P.S.E. 30W ports
- Supports IEEE 1588v2 clock synchronization
- Supports IPV6 new internet protocol version
- Supports Modbus TCP protocol
- Power input 12~57 VDC wide range
- SCADA software manageable through Modbus TCP tag

■ Ignition Gateway Redundant Application

Machines

GATEWAY REDUNDANCY
Master
IP: 192.168.10.10
SQL Database

O-Ring
recovery time<30ms

VRRP

Robots

Backup
IP: 192.168.10.20
SQL Database

PLC

Virtual IP: 192.168.10.15

◀ Why ORing?
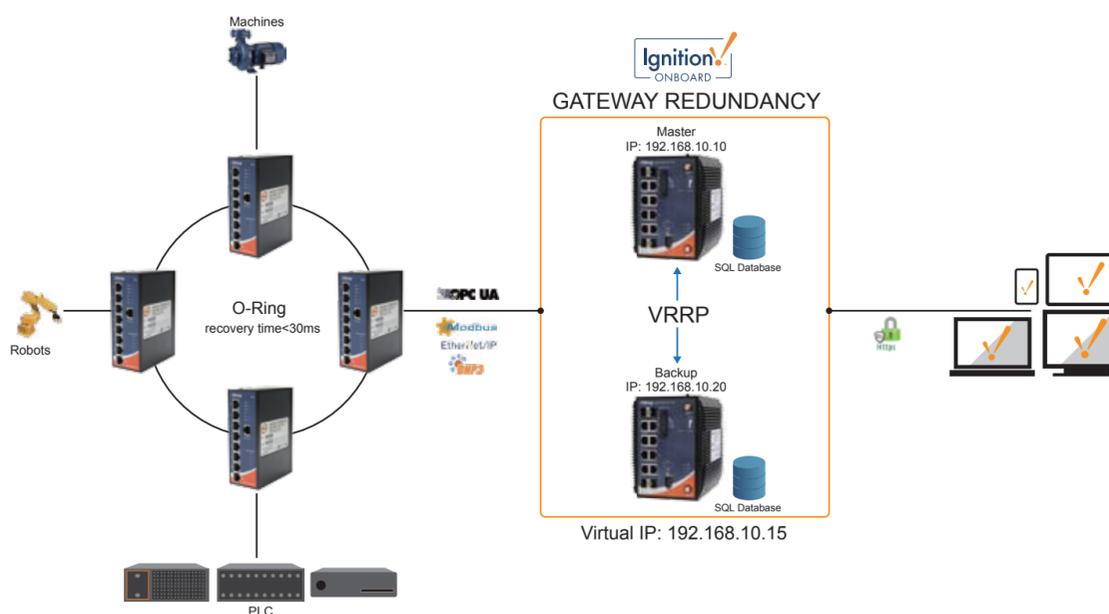
- Certified by Inductive Automation and approved by Ignition Onboard program
- Comprehensive functions in one device with support for multiple use cases and applications as well as flexibility for customers to choose software components
- Supports multiple redundancy mechanisms including VRRP, Ignition Gateway Redundancy, and dual power inputs
- Built in with SSD storage and integrated SQL Database for massive data logging
- Resistance in harsh industrial environments with a wide operating temperature range from -40 to 75°C and fanless design