

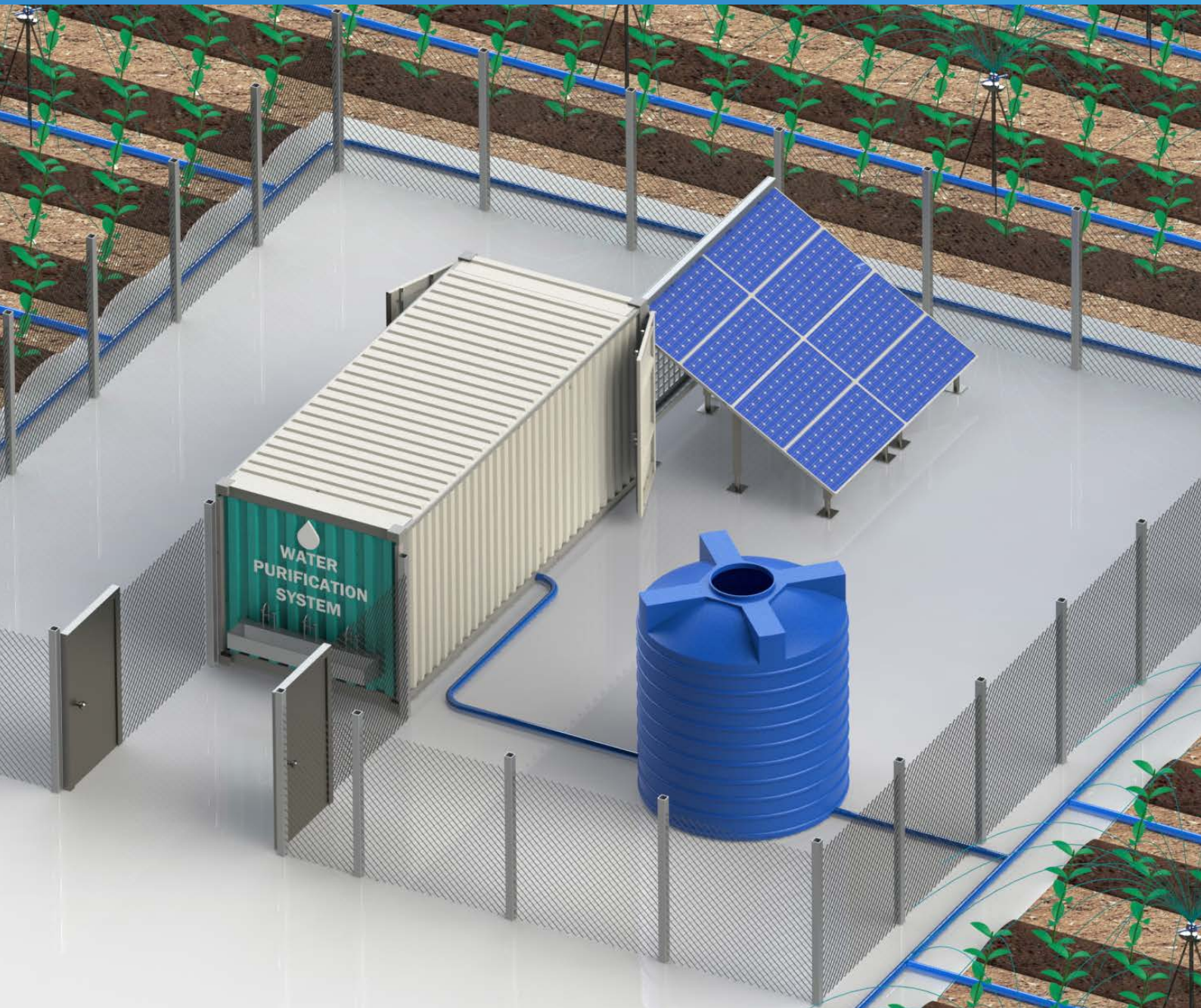
New Power System Renewable Energy Smart Farm



HYUNTAI Co., Ltd.
Green Environment Energy

Solar Power Generation Convergence System

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- Load Module - Standard ISO 20ft container application, move/dynamic optimization and rigid structure design
- Operational/crime monitoring system - IoT- based sensing module application/crime monitoring system establishment development

Solar Power Convergence System

Power Generation Function 01

- Photovoltaic System
 - 400Wh x 8ea Panel, the production of electricity 3.2kWh

Charging Function 02

- Charging System
 - 100Wh x 10ea Build a Battery Charging Station, 1kWh Power charging

Water Purification Function 03

- Purification System
 - 1ton x 3ea Tank, 3ton/day drinking water production

Pumping Function 04

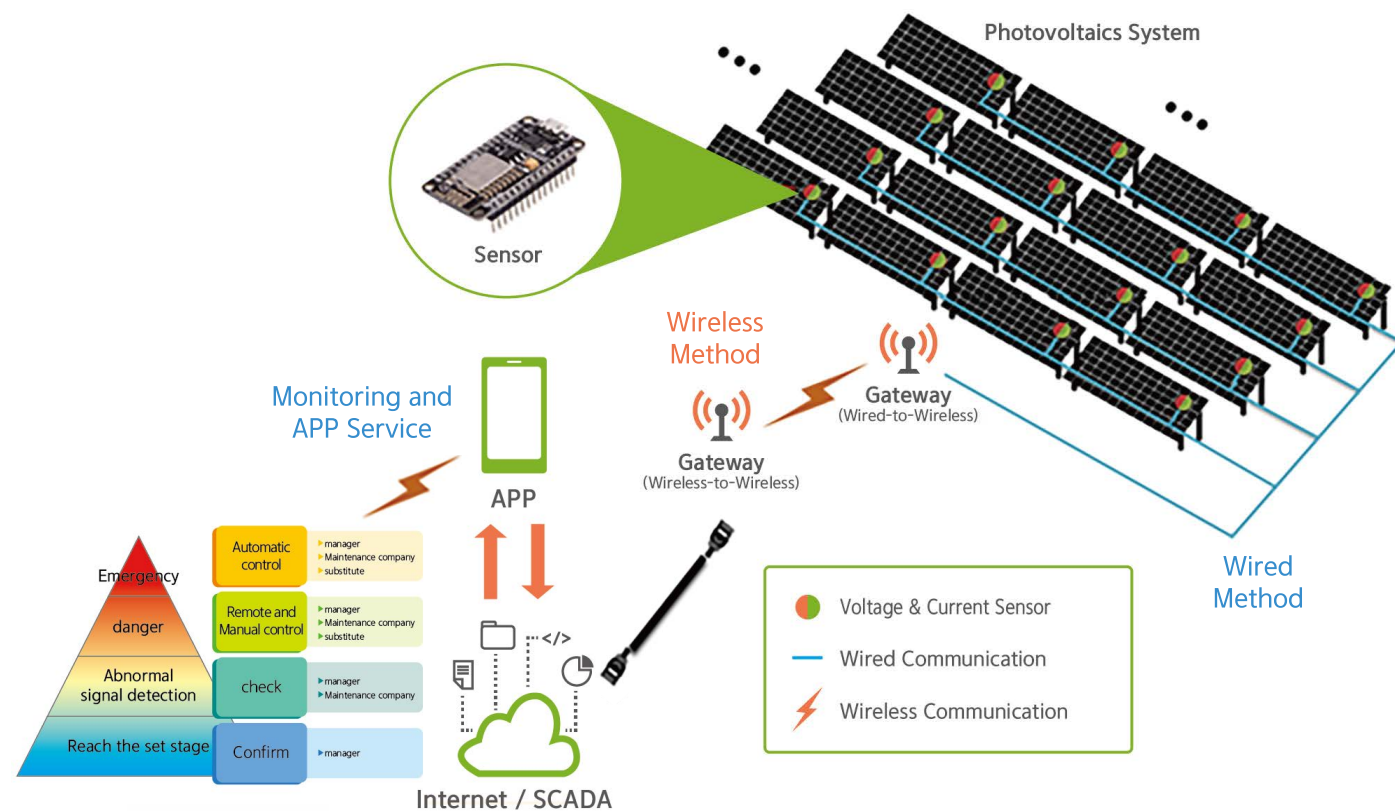
- Pumping System
 - 750Wh x 2EA Pump, 750Wh the production of agricultural water with a pump
 - 10ton x 1ea Tank

Solar Power Failure Diagnosis Solution

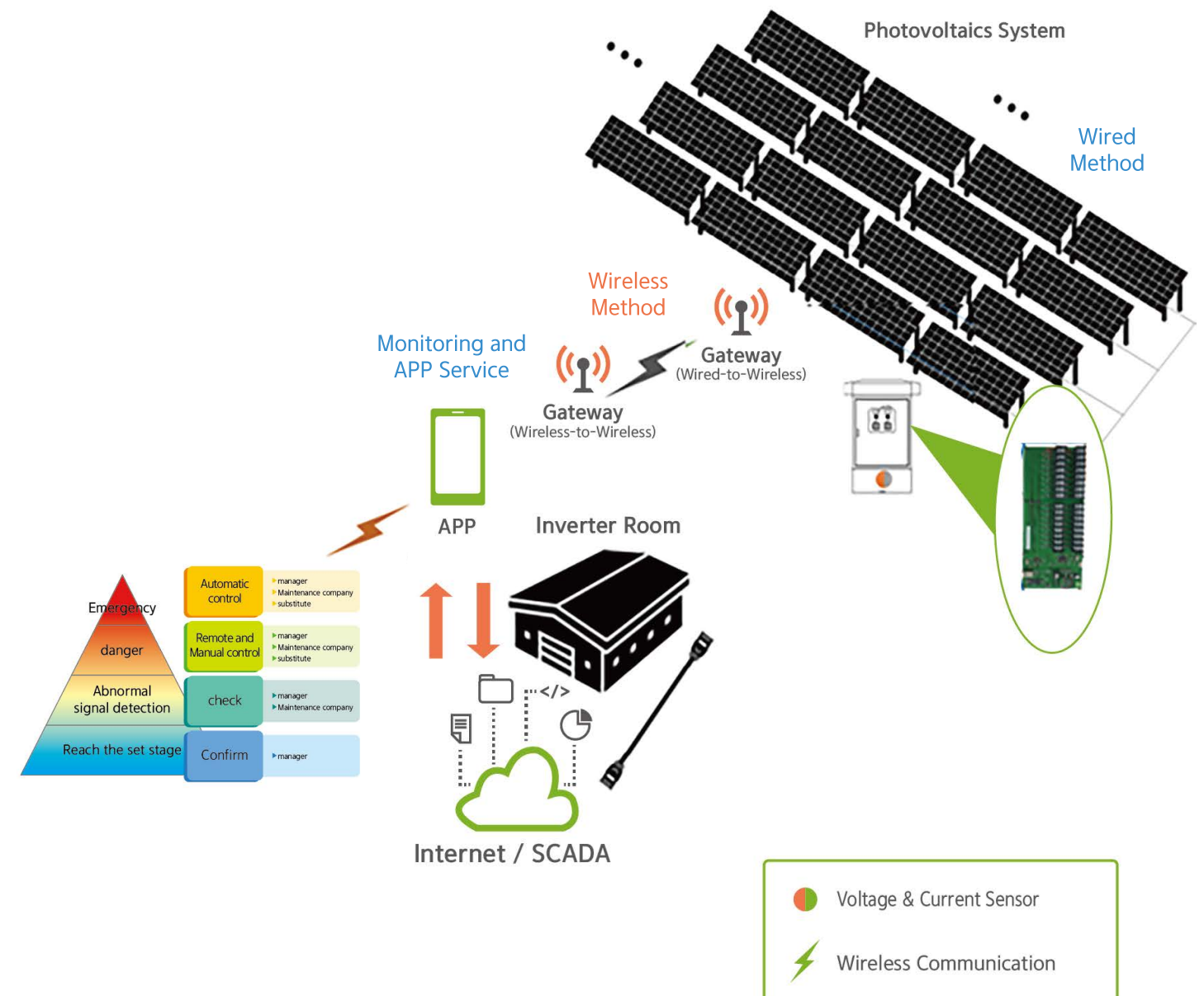
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- System for applying IoT-based fault finding solution in solar power generation system that enables data transmission and remote monitoring by connecting complex sensor module with wired and wireless communication
- Standalone LoRa method, Bluetooth, WiFi, Zigbee wireless communication available

Solar Modules



Connection

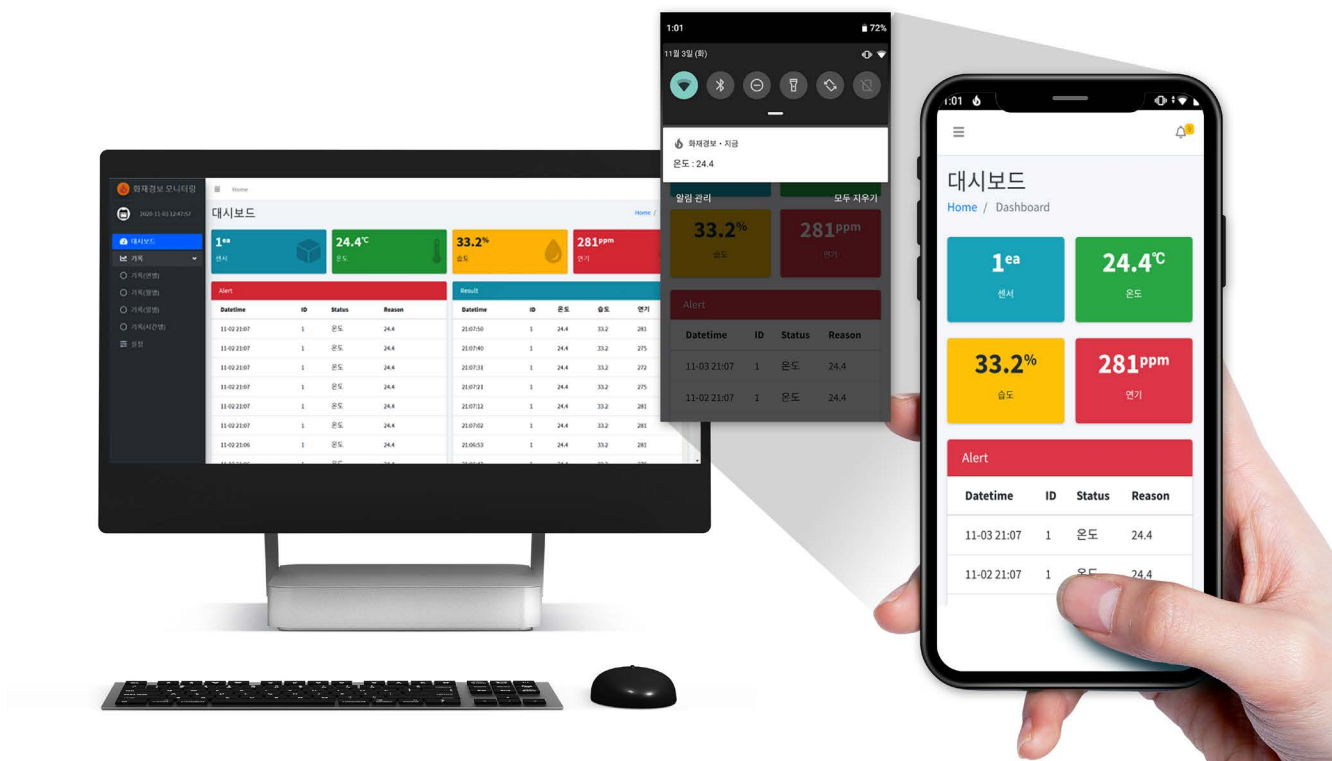
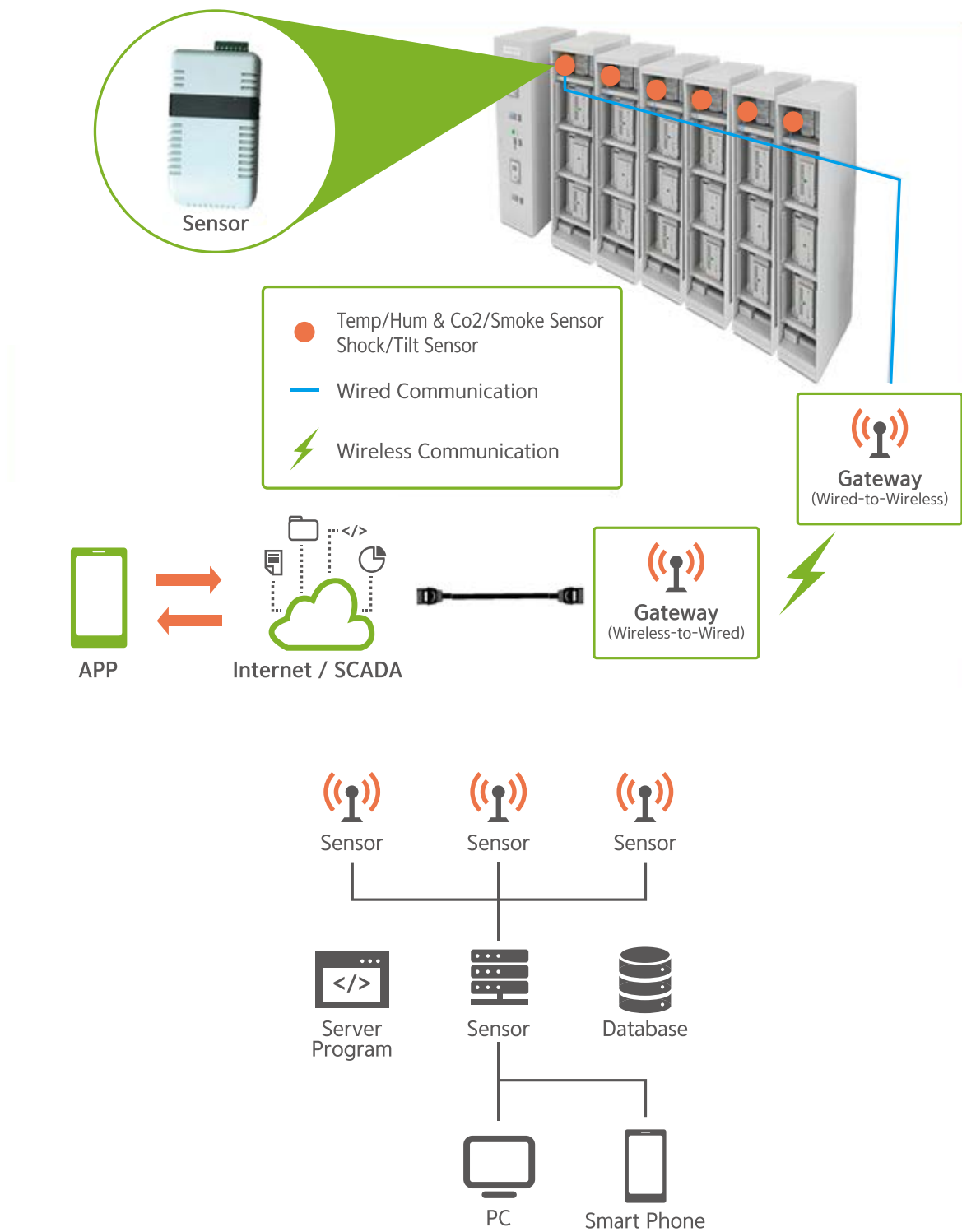


Fire Alarm Solution For Switchgear



- The fire prevention sensor module, which incorporates four functions (Temperature and humidity, smoke, flame, earthquake detection), sends data to the server by wire communication and data transmitted by the mobile controller remotely, a multi-passage fire alarm and the transmitted data is remotely managed by administrator through a switchgear fire alarm and detection monitoring system

Monitoring And App Service



Smart Farm Remote Control Solution

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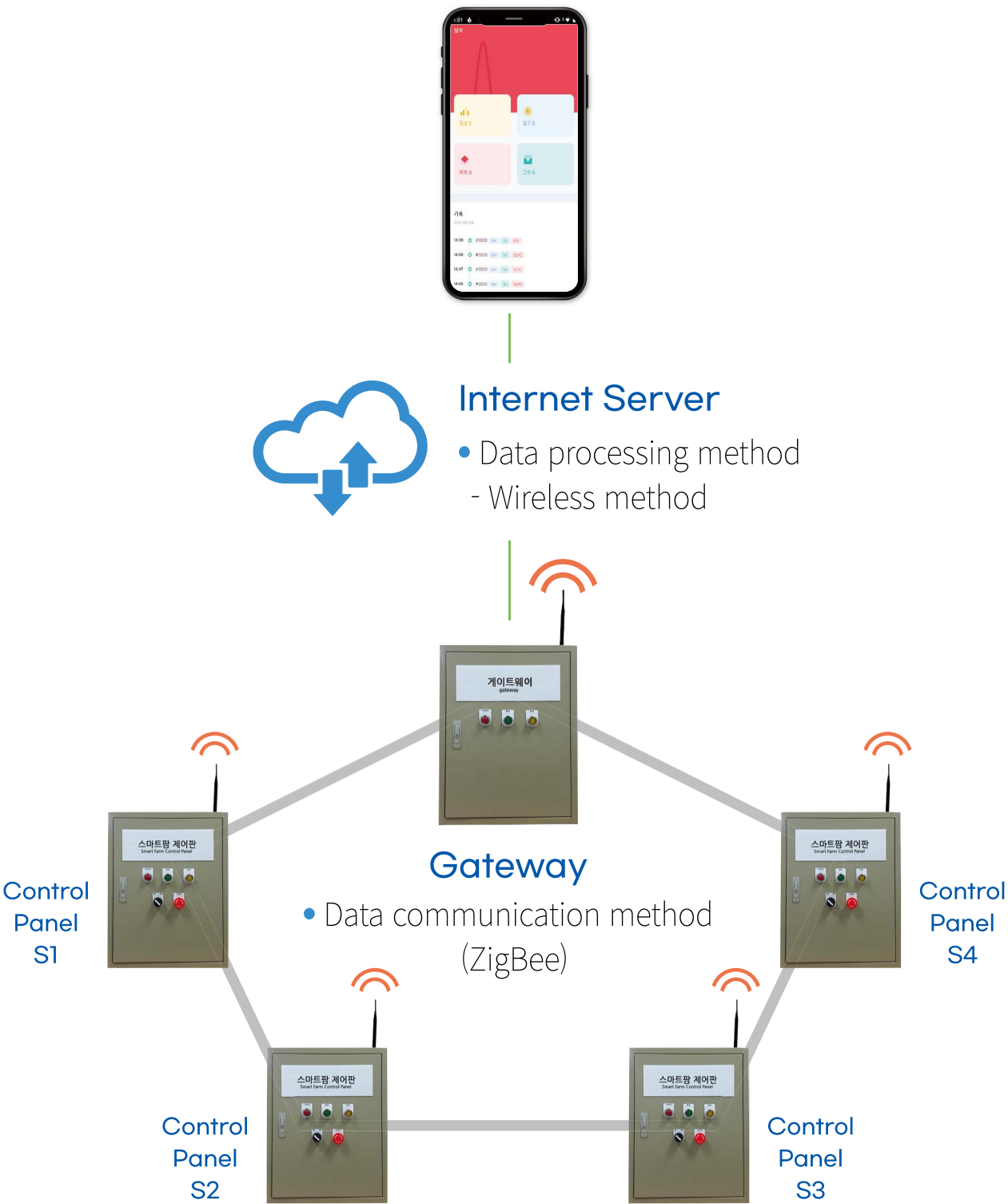


- The smart farm controller in which five functions(Cover, side window, ceiling, floating fan, irrigation) are integrated transmits data to the server through wired and wireless communication, and the transmitted data is remotely managed by an administrator through an IoT-based smart farm monitoring system.

Wireless Smart Farm Control System



Monitoring System

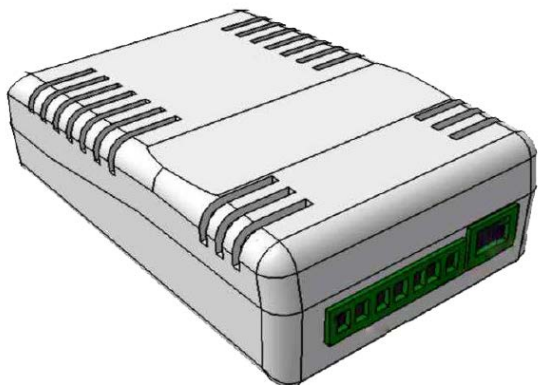


Switchgear Fire Alarm

Solar Power Fault Diagnosis

Smart Farm Remote Control Solution

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Sensor Range by Type

Standard	Contents
Smoke	100~2500
Co ₂	500~5000ppm
Flame	1~1000cps
Tilt	0~500
H ₂	500~5000ppm

Kinds	Standard	Contents
Interface	RJ45PORT	1-PORT 100Base-T(x)
		UTP/STP Cat5,6 Cable EIA/TIA-568 100-ohm(100m)
	I/O device	5 Input (Temperature and Humidity Sensor 3Port, Program Setting 2Port)
Protocol	Port NO.	1000
	IP	192.9.200.10(Default setting)
	Sub mask	255.255.255.0
Sensor Range	Temperature Senser	-40~80°C (Temperature precision ±0.5°C)
	Humidity sensor	0~100% RH (humidity accuracy ±3%RH)
Operating Environment	Temperature range	Operating temperature: -30°C ~ 80°C, Storage temperature: -30°C ~ 85°C
	Humidity range	5 ~ 95% (no dew)
Input Voltage		POE DC48V 2A
Size		100mm(w)×60mm(D)×40mm(H)

Camera

Kinds	Standard	Contents
Interface	Wi-Fi	802.11n
	I/O device	Mini-HDMI, Micro-USB, GPIO 40pin
Protocol	IP	Default setting
	Sub mask	Default setting
	MAC Address	Default setting
Camera	CCD size	1/4inch
	Aperture	1.8(F)
	Diagonal	75.7 degree
	Highest resolution	1080p
Operating Environment	Temperature range	Operating temperature: -30°C ~ 80°C, Storage temperature: -30°C ~ 85°C
	Humidity range	5 ~ 95% (no dew)
Input Voltage		DC5.1V 1.2A
Size		65mm(w)×30mm(D)×5mm(H)

Relay Terminal

Kinds	Standard	Contents
Interface	RJ45 Port	1-PORT 100Base-T(x)
	I/O device	UTP/STP Cat5,6 Cable EIA/TIA-568 100-ohm(100m)
Protocol	Port NO.	1000
	IP	192.9.200.10(Default setting)
	Sub mask	255.255.255.0
	MAC Address	92:01:02:00:00:00
Sensor Range	Temperature Sensor	-40~80°C (Temperature precision ±0.5°C)
	Humidity sensor	0~100% RH (humidity accuracy ±3%RH)
	Relay terminal	2EA
Operating Environment	Temperature range	Operating temperature: -30°C ~ 80°C, Storage temperature: -30°C ~ 85°C
	Humidity range	5 ~ 95% (no dew)
Input Voltage		POE DC48V 2A
Size		100mm(w)×60mm(D)×40mm(H)

HYUNTAI Co., Ltd.

HYUNTAI CO.,LTD.

Tel : +82-043-233-1803

Office : #215, CHUNGBUK TECHNOPARK, 9, Jeongtong-ro, Deoksan-myeon, Jincheon-gun,
Chungcheongbuk-do, Republic of Korea (27872)

R&D Center : #774, E9 Bldg, 1, Chungdae-ro, Chungbuk University, Seowon-gu, Cheongju-si,
Chungcheongbuk-do, Republic of Korea (28644)
