

About Us

Bridgetek is a leading global semiconductor company providing high performance microcontroller units (MCUs), display IC products and developing innovative silicon solutions that enhance seamless interaction with latest connectivity technologies.

The key objective from the company is to provide core bridging technology in order to support engineers with highly sophisticated, feature-rich, robust and simple-to-use product platforms. These platforms enable creation of electronic designs with high performance, low peripheral component requirements, low power budgets and minimal board real estate.

Bridgetek resources will be devoted to two particular product areas; the multi-award winning Embedded Video Engine (EVE) graphic controller ICs which enable engineers to implement more sophisticated human machine interface (HMI) systems, plus the unique and equally innovative performance-optimized microcontroller units (MCUs) with their expansive array of different connectivity options and high processing speeds.

Singapore (HQ)



1 Tai Seng Avenue, Tower A, #03-05,
Singapore 536464
Enquiry: sales.apac@brtchip.com
Support: support.apac@brtchip.com

China

Room 1103,
No. 666 West Huaihai Road
200052 Shanghai P.R. China
Tel : +86(21) 6235 1596
Fax: +86 (21) 6235 1595

Taiwan

2F No. 516 Sec 1,
NeiHu Road Taipei 114,
Taiwan
Tel : +886 (2) 8797 1330
Fax: +886 (2) 8751 9737

Vietnam

5th Floor, Lutaco Tower Building,
173A Nguyen Van Troi Street,
Phu Nhuan Ward, Ho Chi Minh City
Vietnam
Tel : +84 (28) 3845 3222

USA

7130 SW Fir Loop Tigard,
OR, 97223-8160 USA
Tel : +1 (503) 547 0988
Fax: +1 (503) 547 0987

UK

Unit 500, Academy Park,
51 Gower Street, Glasgow,
G51 1PR, UK
Tel : +44 (0) 141 418 4520

Intelligent Display Panel (IDP) Modules

FEATURES	IDP-3500-04A	IDP-3510-04A	IDP-4000-04A	IDP-5000-04A	IDP-7000-04A	IDP-7010-04A	IDP-1000-04A
Display size and resolution	3.5" 320 x 480	3.5" 320 x 240	4.0" 480 x 480	5.0" 800 x 480	7.0" 800 x 480	7.0" 800 x 480	10.1" 1280 x 800
EVE Device	FT811	FT813	BT815	FT813	BT815	BT815	BT817
Touch	Capacitive	None	Capacitive	Capacitive	Capacitive	Capacitive	Capacitive
MCU	FT903	ESP32	RP2040	FT903	FT903	FT903	RP2040
Data Interface	RS485 (RJ45 X 2)	Wi-Fi, Bluetooth, Bluetooth LE	RS485 (JST Connector)	RS485 (RJ45 x 2)	RS485 (RJ45 x 2)	RS485 (RJ45 x 2)	RS485 (JST Connector)
Power	24V (9 – 24V)	5V Micro USB	24V (15 – 24V)	24V (9-24V)	24V (9-24V)	24V (9-24V)	24V (9-24V)
Other Features	<ul style="list-style-type: none">• Smart LED Indicator• Audio Buzzer• ID Switch	<ul style="list-style-type: none">• USB-UART Interface• Smart LED Indicator• Audio Buzzer• User-defined Function Button	<ul style="list-style-type: none">• Audio Buzzer• ID Switch	<ul style="list-style-type: none">• Digital Microphone• Ambient Light Sensor• Smart LED Indicator• Audio Buzzer• ID Switch	<ul style="list-style-type: none">• Digital Microphone• Ambient Light Sensor• Smart LED Indicator• Audio Buzzer• ID Switch	<ul style="list-style-type: none">• Digital Microphone• Ambient Light Sensor• Smart LED Indicator• Audio LED Indicator• Audio Buzzer• ID Switch• 13.56MHz RFID Reader	<ul style="list-style-type: none">• Time-of-Flight Sensor• Ambient Light Sensor• Smart LED Indicator• Audio Buzzer• ID Switch
Enclosure Form Factor	Portrait Display for Wall and Panel Mounting	L-Shaped Desktop Display	Sleek and Modern Design for Wall and Panel Mounting	5" Landscape Display in Enclosure for Wall or Panel Mounting	7" Landscape Display in Enclosure for Wall or Panel Mounting	Version of IDP-7000-04A with RFID Reader	Large 10.1" Display with Sleek and Modern Design for Wall and Panel Mounting

3.5" Screen Size

IDP-3500-04A IDP-3510-04A

4.0" Screen Size

IDP-4000-04A

5.0" Screen Size

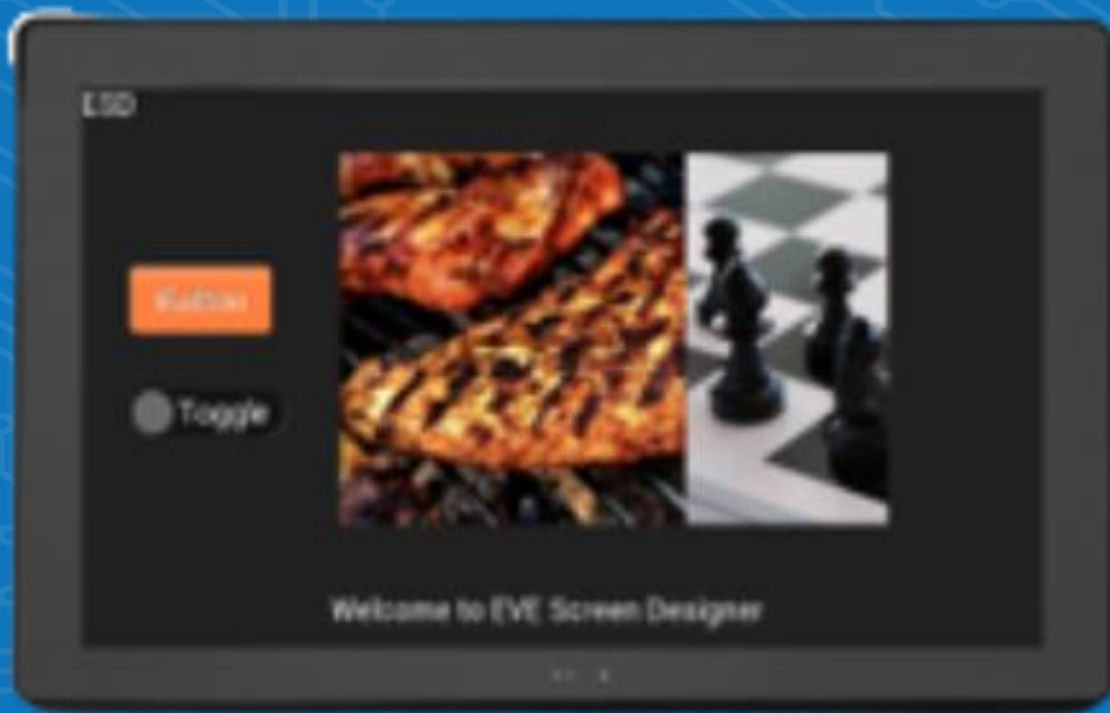
IDP-5000-04A

7.0" Screen Size

IDP-7000-04A IDP-7010-04A

10.1" Screen Size

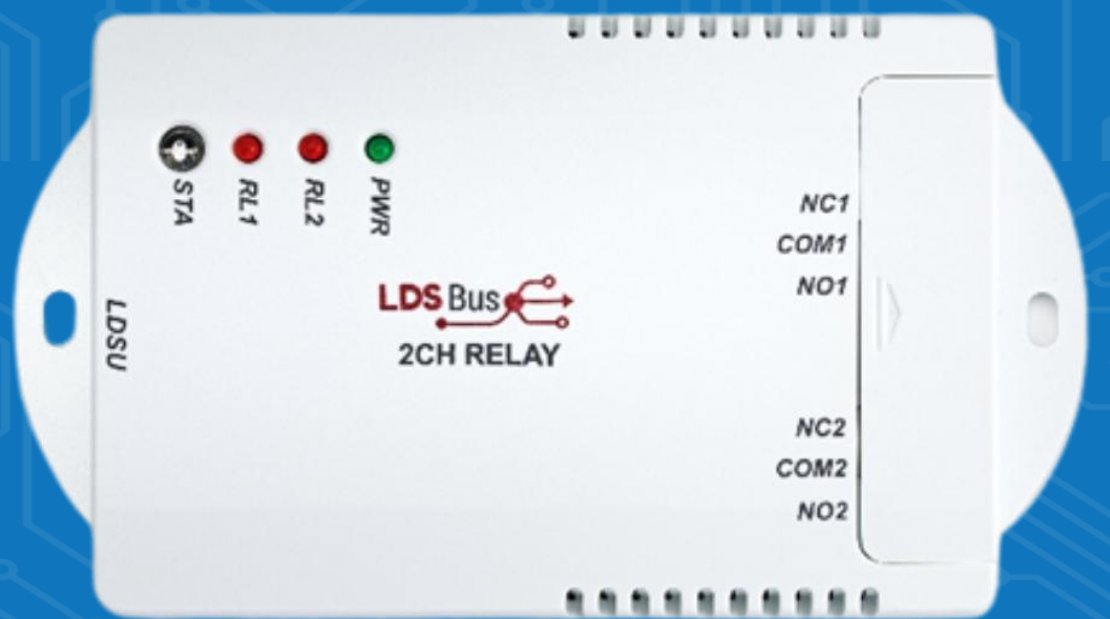
IDP-1000-04A



Intelligent Display Panel Modules (IDP)



Sensors



Actuators

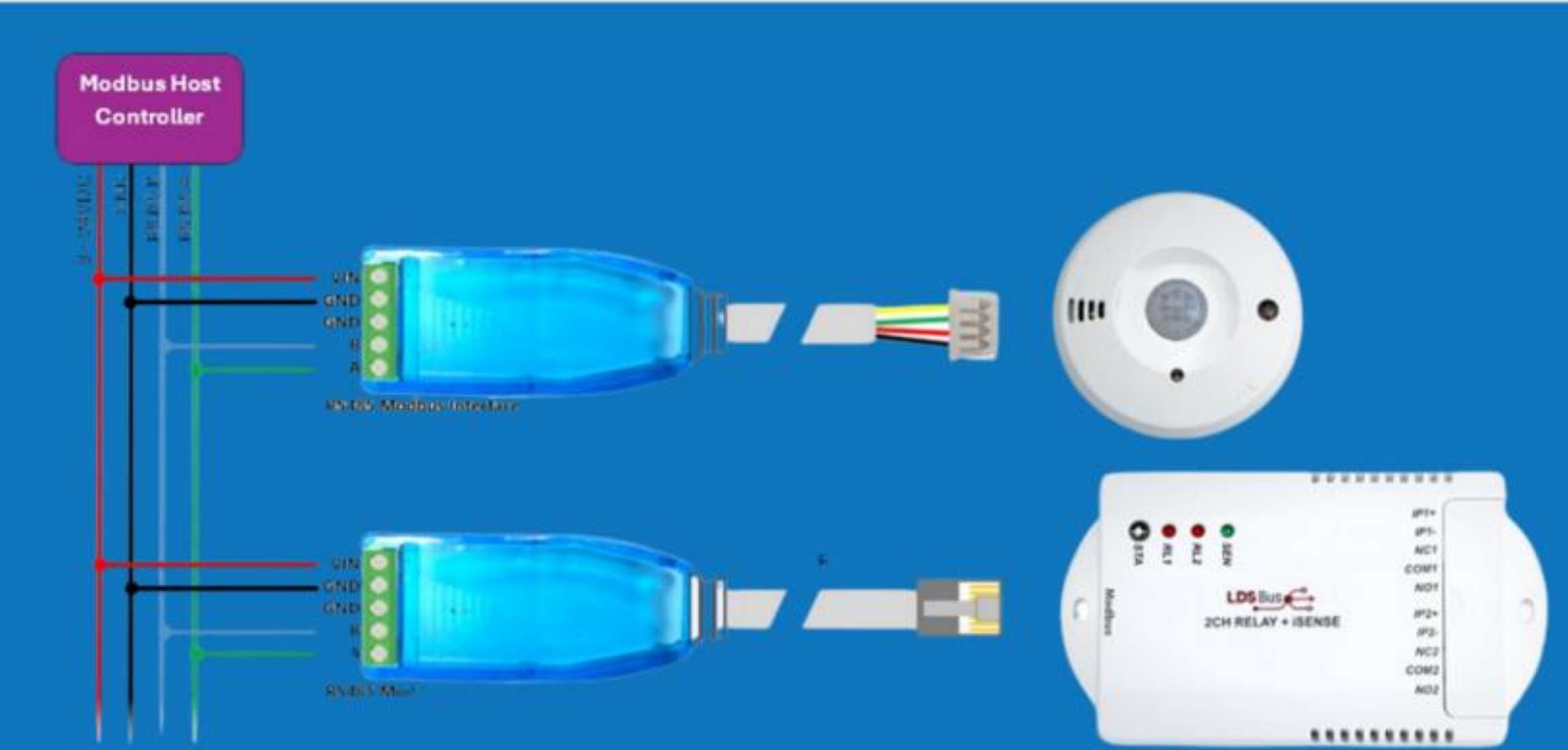
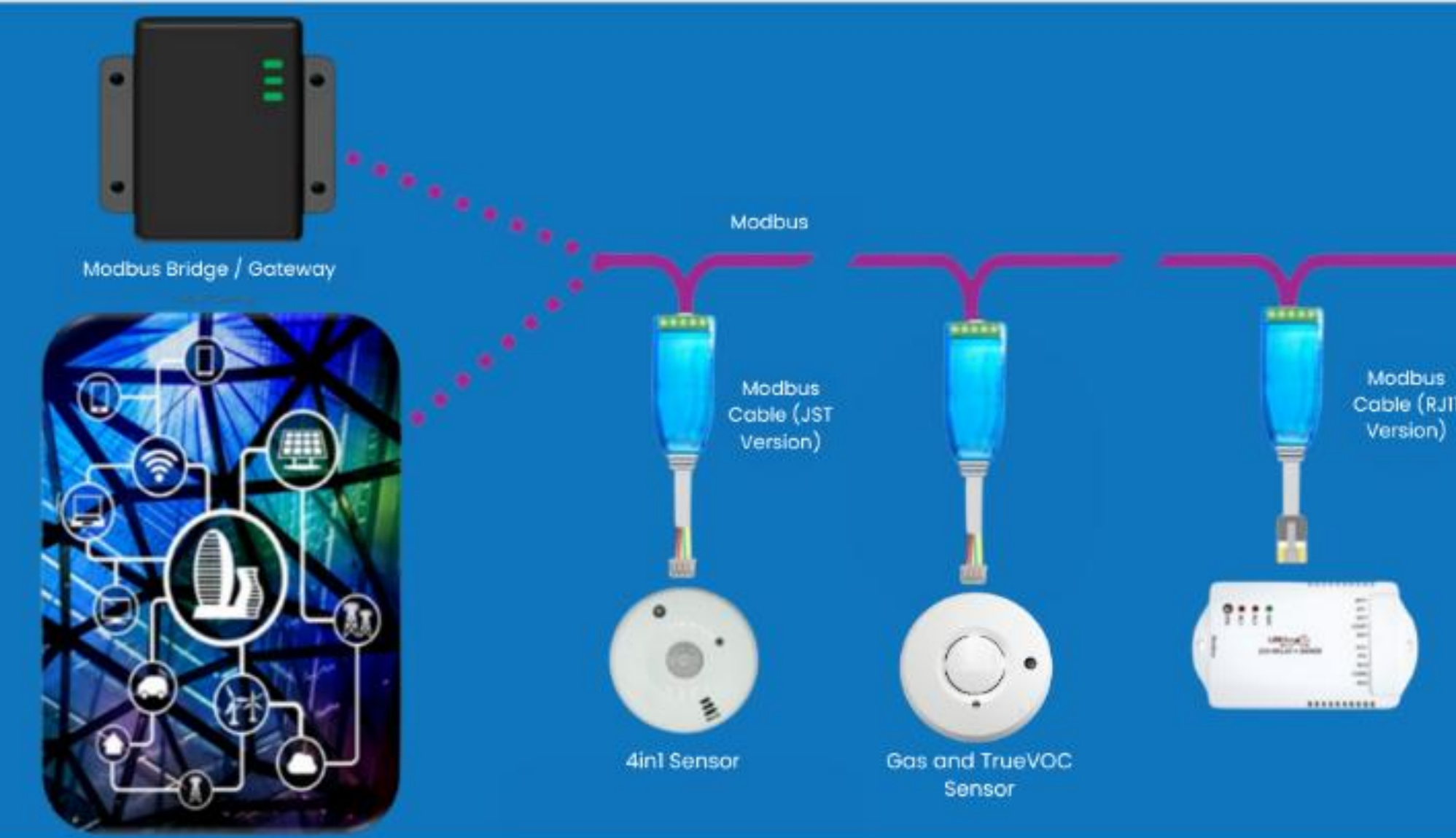


Adapters



Modbus Products

Sensors | Adapters | Actuators



Actuators

2CH RELAY



2-Channel switching of AC and DC devices

2CH RELAY + iSENSE



2-Channel switching of AC and DC devices with load sensing

4CH Solid State Relay



4-channel solid-state switching of AC devices

Isolated IO Controller



Isolated I/O for water level sensing, lighting control, HVAC and many other applications

Trailing Edge Light Dimmer



Control intensity of dimmable LED lamps and other AC lighting systems

Sensors

Gas and TrueVOC Sensor



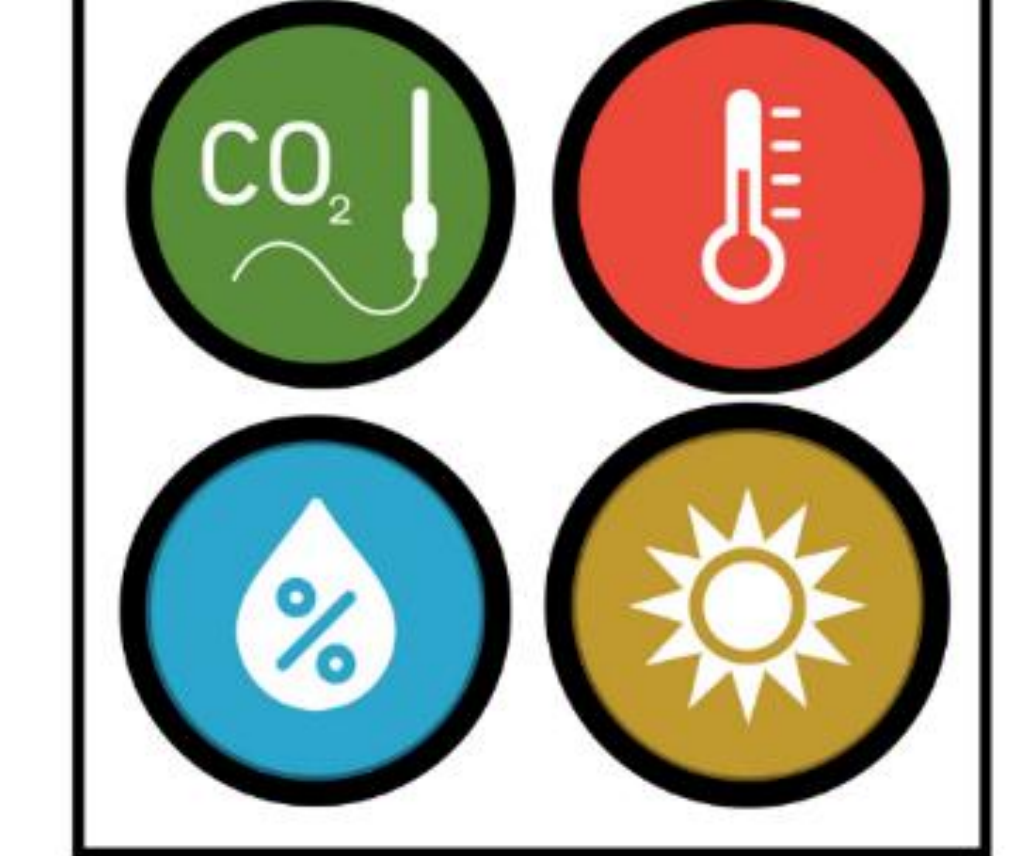
Integrated sensors for TrueVOC and Index Air Quality (IAQ) measurements

4in1 Sensor



Monitors Temperature, Humidity, Motion & Ambient Light

C02 Multi-sensor



Monitors Temperature, Humidity, Ambient Light and & CO₂ levels

Sensor Adapters

DO Sensor



Measures concentration of dissolved oxygen in liquids

ORP Sensor



Measures chemical reactivity and water quality

EC Sensor



Measures concentration of dissolved ions (salts, minerals, etc.)

pH Sensor



Measures pH and chemical reactivity

Salinity Sensor



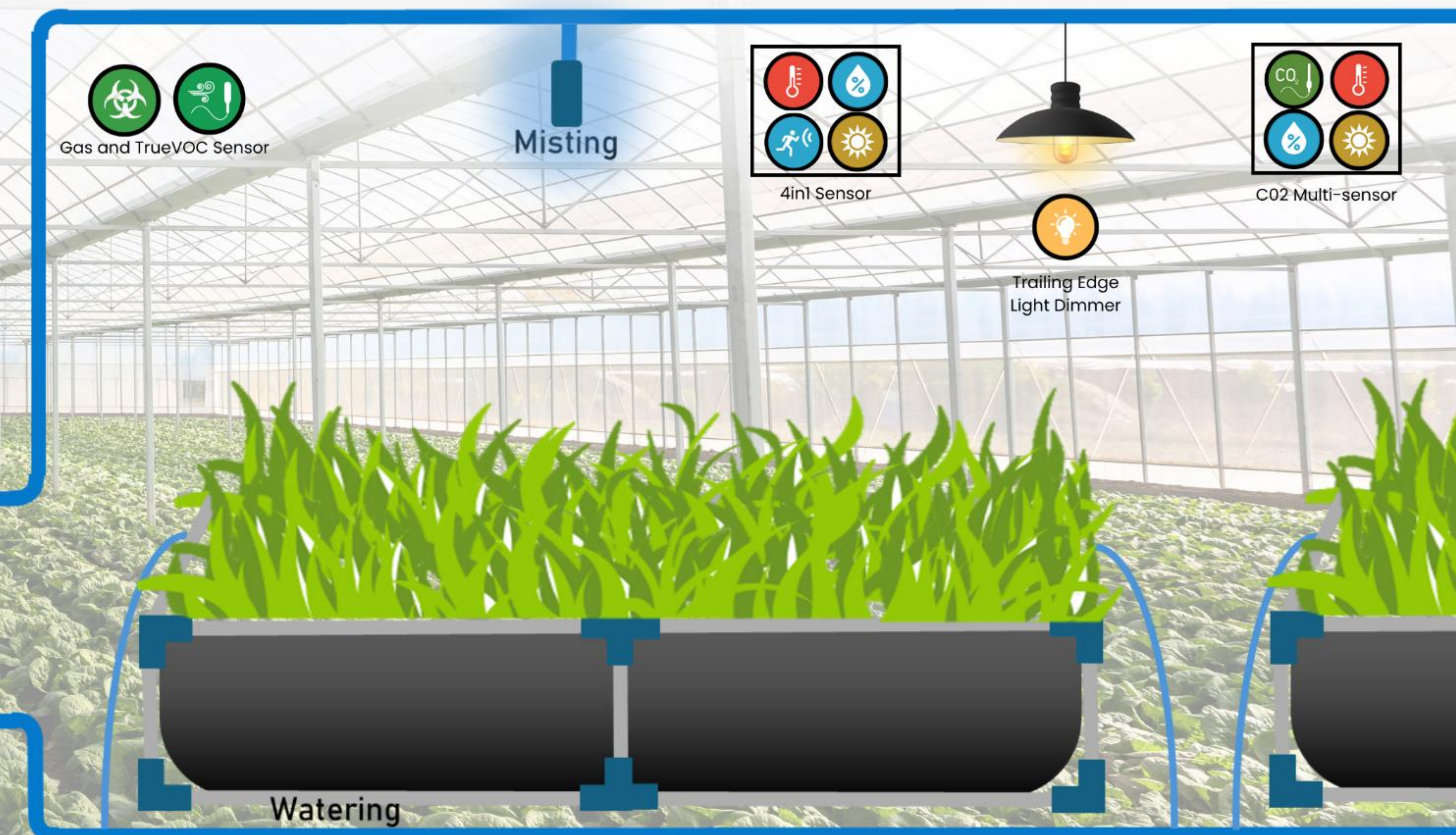
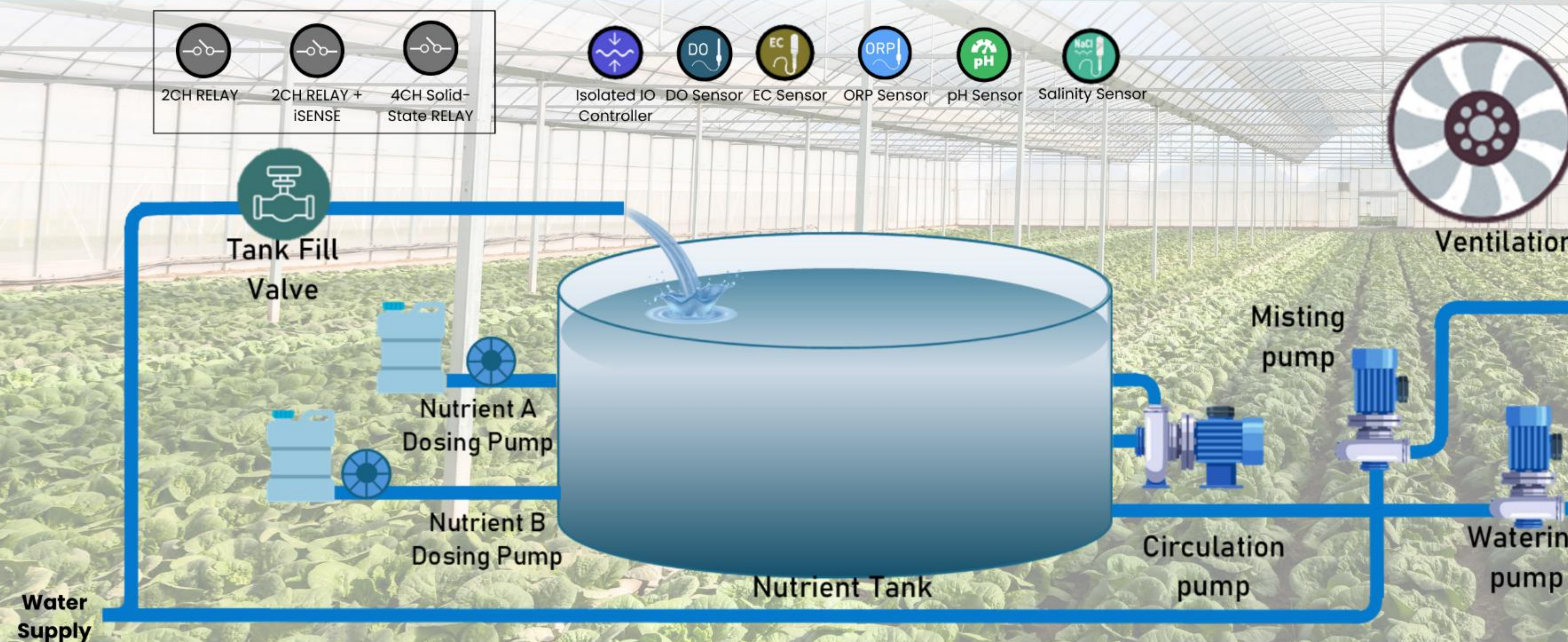
Measures concentration of dissolved salts in liquid

Thermocouple Sensor



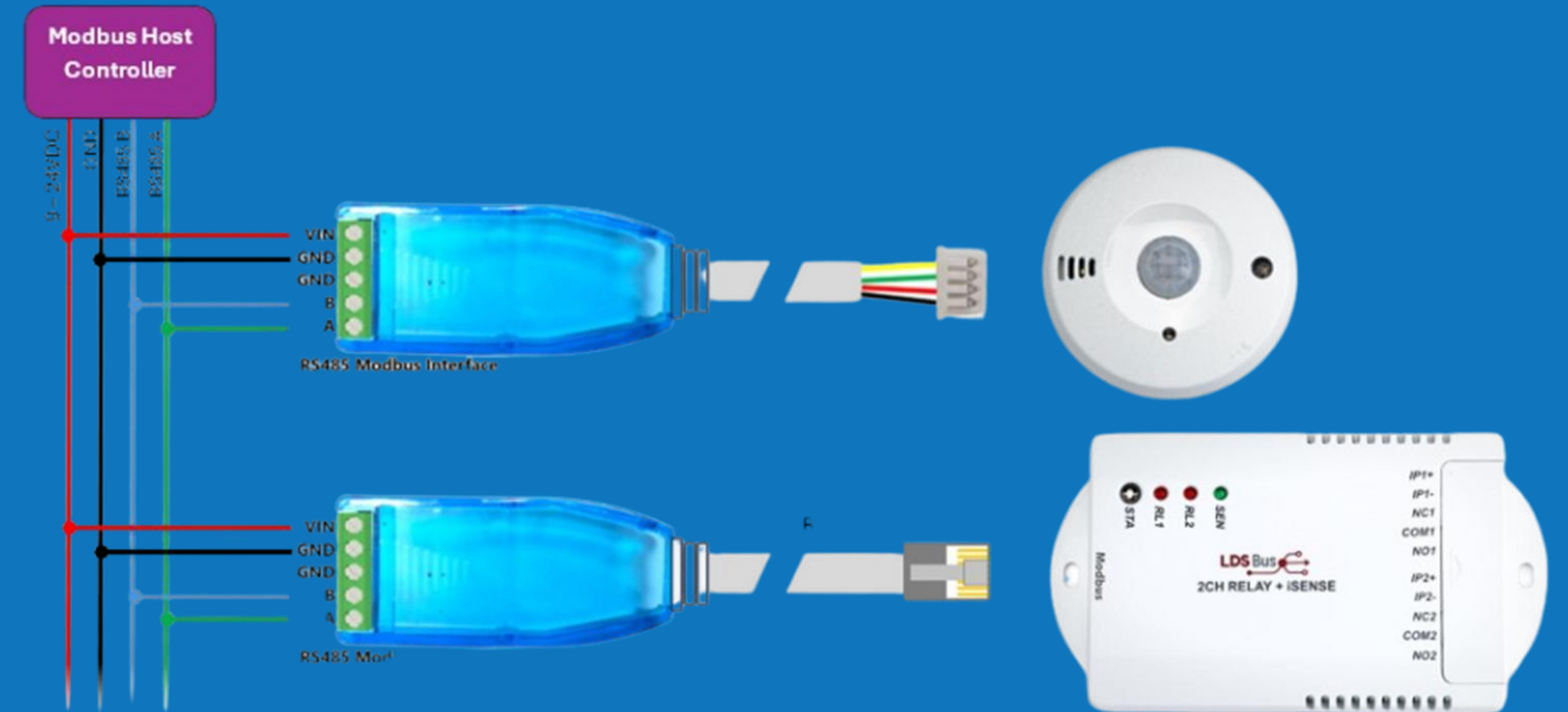
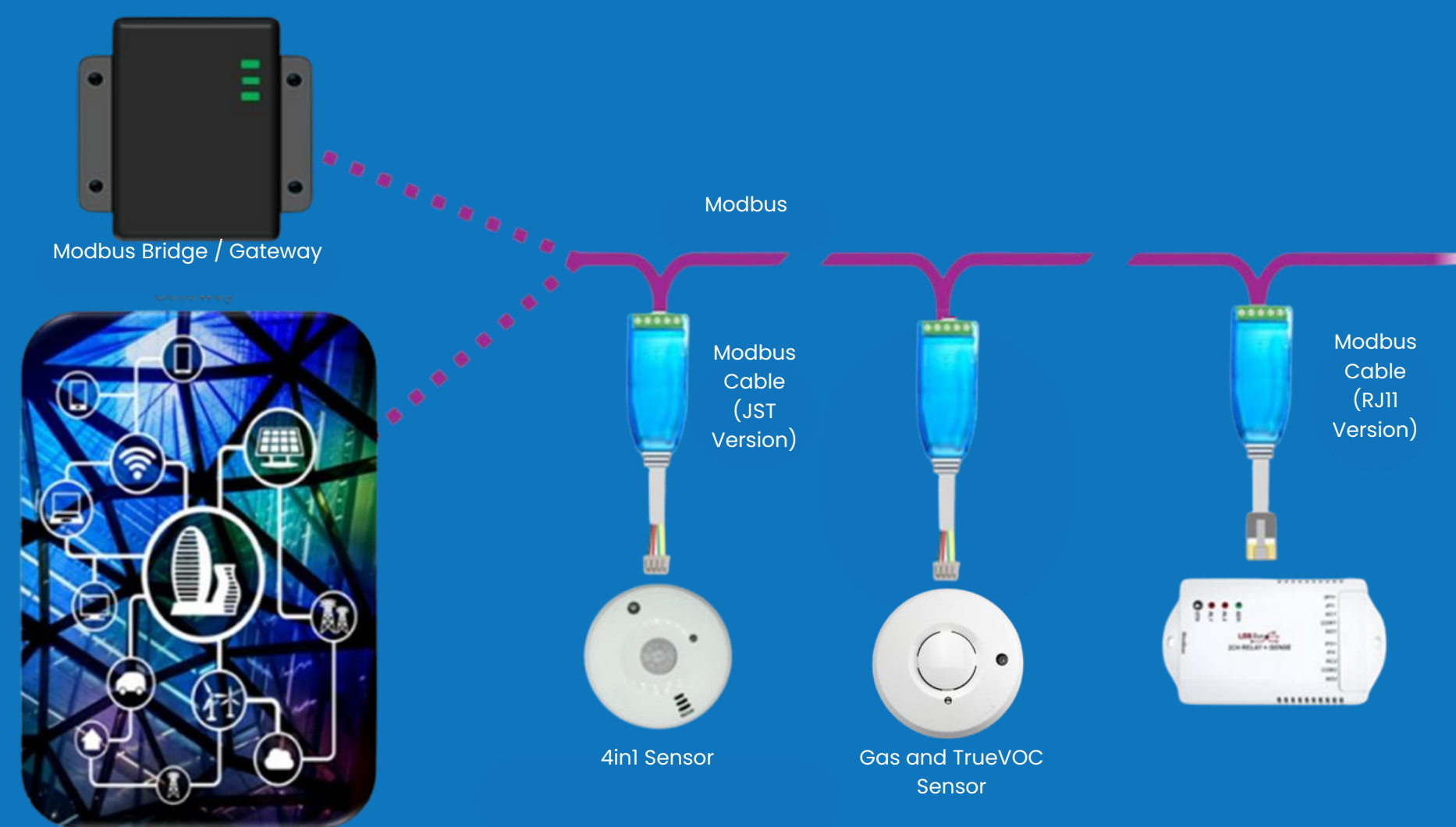
Measures temperature over a wide range

*Bridgetek Sensor Adapters are designed to work with an analog galvanic probe to form a complete sensor.



Modbus Products

Sensors | Adapters | Actuators



Sensors



4in1 Sensor

Monitors temperature, humidity, motion, and ambient light in one compact unit

- Temp: Up to 70 °C (± 0.2 °C)
- Humidity: 0–95% RH ($\pm 2\%$)
- Motion detection
- Light: Up to 64K Lux

Applications include smart automation, energy efficient buildings, and climate control.



CO2 Multi-Sensor

Monitors CO₂, temperature, humidity, and ambient light in one compact unit.

- CO₂: Up to 40,000 ppm
 - Basic version: ± 50 ppm (within range 400–2000ppm)
 - Pro version: ± 40 ppm (within range 400–5000ppm)
- Temp: Up to 60 °C (± 1.5 °C)
- Humidity: 0–100% RH ($\pm 9\%$)
- Light: Up to 100K Lux ($\pm 15\%$)

Applications include smart buildings, and air quality control.



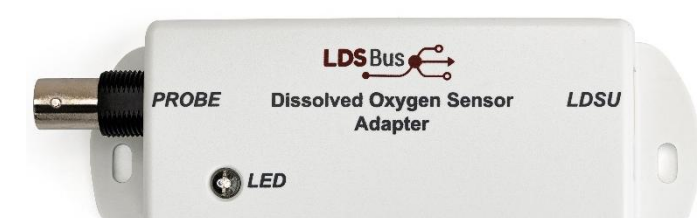
Gas and TrueVOC Sensor

Built-in sensors for TrueVOC and IAQ readings.

- TVOC: Up to 65,000 ppb $\pm 12\%$
- IAQ Index: 0–500 $\pm 12\%$

Applications include smart buildings and air quality monitoring.

Adapters



DO (Dissolved Oxygen) Sensor Adapter

Precisely tracks Dissolved Oxygen levels in water

- Range: 0–20 mg/L
- Resolution: 0.01 mg/L with linearized output
- Perfect for fisheries, hatcheries, and water systems

Applications include aquaculture, environmental monitoring, and industrial treatment.



EC (Electrical Conductivity) Sensor Adapter

Measures ion concentration in liquids with high accuracy

- Range: 0.001–150 mS/cm
- High resolution for detailed monitoring
- Mounting: Flush or DIN rail

Applications include hydroponics, aquaponics, water treatment, and industrial use.



ORP (Oxygen Reduction Potential) Sensor Adapter

Measures a liquid's oxidation-reduction potential for fast, accurate insight into chemical reactivity and water quality.

- Range: –2000 mV to +2000 mV with 1 mV resolution

Applications include water treatment, aquaculture, agriculture, industrial systems



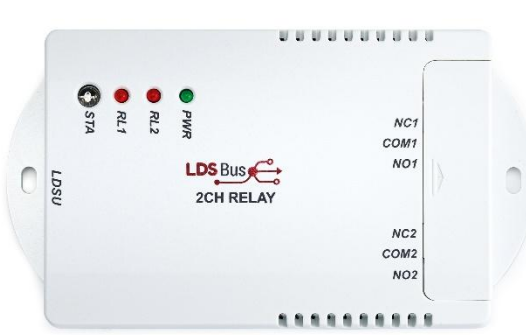
pH Sensor Adapter

Converts pH probe signals into digital data for real-time tracking and automation of liquid acidity/alkalinity.

- Range: 0–14 pH

Applications include water treatment, aquaculture, pools, hydroponics, and chemical processing

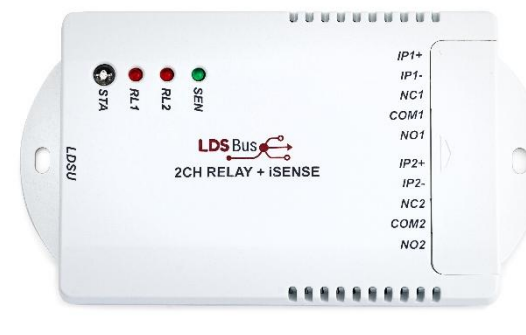
Actuators



2CH Relay

Control two independent AC/DC circuits reliably with latching feature to retain the state through power cycles - perfect for automation systems requiring dependable switching and state retention.

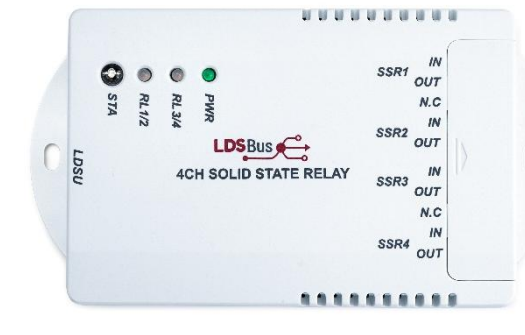
Applications: Home & industrial automation, motor control, lighting, pumps, valves, and energy management.



2CH Relay + iSENSE

Control two independent AC/DC circuits reliably with latching feature to retain the state through power cycles. iSENSE feature monitors the load current for each channel up to 20A.

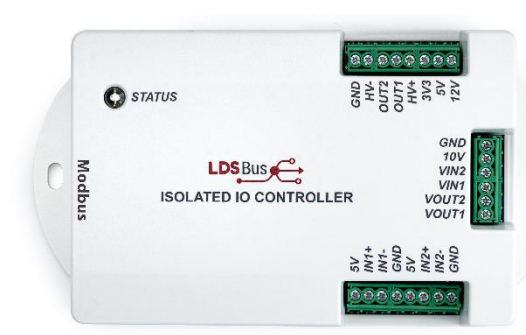
Applications: Home & industrial automation, motor control, lighting, pumps, valves, and energy management.



4CH Solid State Relay

Durable 4-channel solid-state switching for controlling AC loads. No moving parts for reliable 4-channel switching.

Applications include motor control, LED lighting, HVAC, pumps, smart buildings, and industrial automation.



Isolated IO Controller

Provides isolated inputs and outputs to monitor and control external devices.

- 2 analog inputs
- 2 analog outputs
- 2 digital inputs
- 2 digital outputs

Versatile I/O module with isolation for integration into smart systems, lighting control, automation, building management, and environmental monitoring.



Trailing Edge Light Dimmer

Delivers silent, flicker-free dimming using trailing edge technology—perfect for modern electronic loads including dimmable LED lamps.

Applications include Home/office automation, mood lighting, smart buildings, and energy-efficient upgrades.

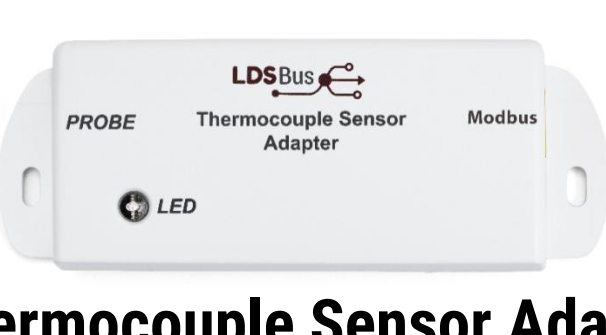


Salinity Sensor Adapter

Accurately measures salt concentration in water using a salinity probe

- Range: 1–120 ppt with 1 ppt resolution
- Converts analog signals to digital for real-time monitoring

Applications include aquaculture, hydroponics, seawater systems, pools, and treatment plants.



Thermocouple Sensor Adapter

Uses a K-type thermocouple to measure extreme temperatures

- Range: –200 °C to 1372 °C with ± 0.5 °C accuracy.

Applications include food production, metal extrusion, cryogenic storage, and industrial ovens/freezers.

TFT Displays (3.5" to 15.6")

Features	DP-0351-11A	DP-0431-11A	DP-0501-01A	DP-0501-11A	DP-0502-11A	DP-0701-01A	DP-1011-01A	DP-1012-01A	DP-1561-01A
Display Size	3.5"	4.3"	5"	5"	5"	7"	10.1"	10.1"	15.6"
Resolution	320 x 240	480 x 272	800 x 480	800 x 480	480 x 272	800 x 480	1280 x 800	1920 x 1200	1920 x 1080
Touch	Resistive	Resistive	Capacitive	Resistive	Resistive	Capacitive	Capacitive	Capacitive	Capacitive
Touch Points	1	1	5	1	1	10	10	5	10
Touch Controller	-	-	FT5336	-	-	FT5426	GT928	GT911	ILI2511
Brightness	530 Cd/m2	350 Cd/m2	420 Cd/m2	400 Cd/m2	250 Cd/m2	420 Cd/m2	900 Cd/m2	350 Cd/m2	860 Cd/m2
Interface	24-bit RGB	24-bit RGB	24-bit RGB	24-bit RGB	24-bit RGB	24-bit RGB	1 port LVDS	2 port LVDS	2 port LVDS
Module Size	76.90(H) x 64.00(V) x 4.25(D)	105.50(H) x 67.20(V) x 4.10(D)	136.80(H) x 93.60(V) x 5.00(D)	120.70(H) x 75.80(V) x 4.30(D)	120.70(H) x 75.80(V) x 4.30(D)	165(H) x 100(V) x 7.42(D)	250(H) x 173(V) x 7.1(D)	259(H) x 158(V) x 4.23(D)	384.2(H) x 253.6 (V) x 8.6 (D)
Active Area	70.08(H) x 52.56(V)	95.04(H) x 53.86(V)	108.00(H) x 64.80(V)	108.00(H) x 64.80(V)	110.88(H) x 62.83(V)	154.08(H) x 85.92(V)	216.96(H) x 135.60(V)	216.8064(H) * 135.504(V)	344.16(H) * 193.59(V)



3.5"



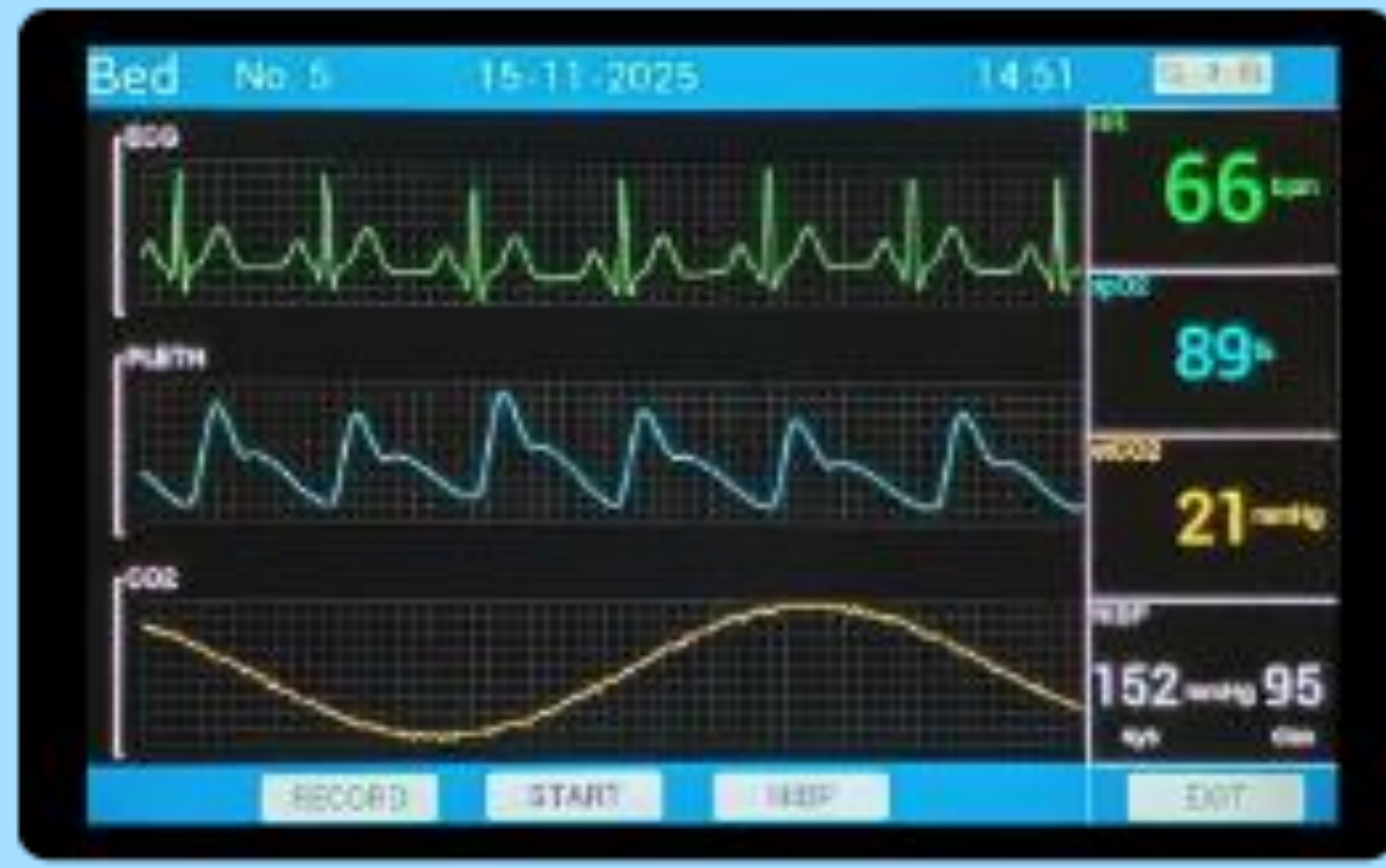
4.3"



5"



7"



10.1"



15.6"