

# San Ace Controller

## Features

### Preventive maintenance of equipment (IoT functionality)

- Easy to connect to user's terminal devices. (Wireless LAN / wired LAN)
- Enables users to monitor the status of fans and sensors from remote terminal devices.
- Enables users to control the fan speed remotely via terminal devices.
- Detects outlier sensor measurements and sends alerts.
- Saves the fan's cumulative operating time and other fan measurement data to the cloud for later use.
- Prevents heat problems with user equipment, contributing to reducing maintenance time and costs.

### Low noise and high energy efficiency (Automatic control)

- Stores temperature, humidity, and air pressure measurements for automatic fan speed control based on the setting conditions.
- Makes fan cooling and ventilation more efficient, reducing noise and improving efficiency.

### Optimized fan settings (Manual control)

- Can connect and control a maximum of four fans, enabling different speed settings for individual fans.
- Optimizes the airflow and static pressure of individual fans in multi-fan systems.



Only the 9CT1-U001 model is cUL-certified.

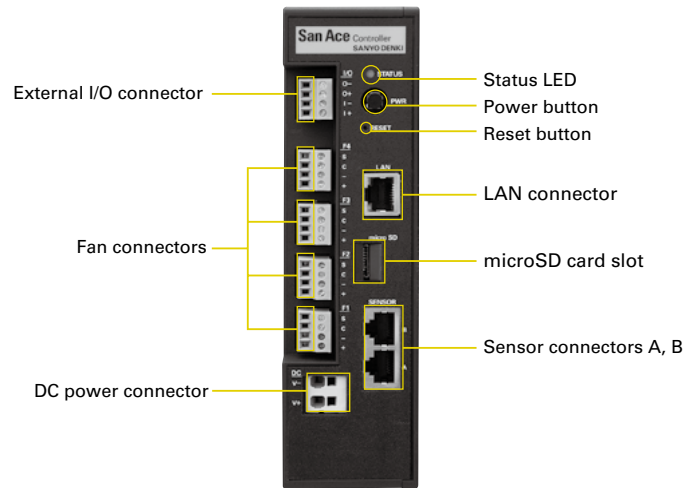
## Specifications

	With wireless LAN	Without wireless LAN	With wireless LAN, cUL certified
Model no.	<b>9CT1-001</b>	<b>9CT1-002</b>	<b>9CT1-U001<sup>(1)</sup></b>
Rated voltage [VDC]	12/24/48		12/24
Power consumption [W]	3.1 <sup>(2)</sup>		
Max. input power	970 W or less		64 W or less (At 12 VDC) 100 W or less (At 24 VDC)
Operating voltage range [VDC]	7 to 60		7 to 27.6
Operating temperature range [°C]	-20 to +70		
Control functions	Manual / automatic		
Control signal	PWM signal High-level voltage (V <sub>OH</sub> ): 3.3/5 V Frequency: 25 kHz		
Monitoring criteria	Fan speed, fan current, fan operation hours, sensor detection value, external input		
No. of connectable fans	Max. 4		
Max. fan connection terminal current (per terminal)	5 A		5 A (At 12 VDC) 4 A (At 24 VDC)
Max. output current (Total)	20 A		5 A (At 12 VDC) 4 A (At 24 VDC)
No. of connectable sensors	Max. 4		
Compatible sensors <sup>(3)</sup>	Temperature / humidity, air pressure, acceleration		
External I/O functions	Input	Photocoupler-isolated input, ON: 15 to 28.8 VDC, OFF: 0 to 5 VDC	
	Output	Photocoupler-isolated open-collector output, load voltage: 28.8 VDC or less, output current: 0.1 A or less	
Communication	Wireless	IEEE 802.11b/g/n, frequency: 2.4 GHz <sup>(4)</sup>	IEEE 802.11b/g/n, frequency: 2.4 GHz <sup>(4)</sup>
	Wired	Ethernet 10BASE-T, 100BASE-TX	
Size [mm]	50 (W) × 135 (D) × 180 (H)		
Mass [g]	450		
Material	Casing: Plastic		

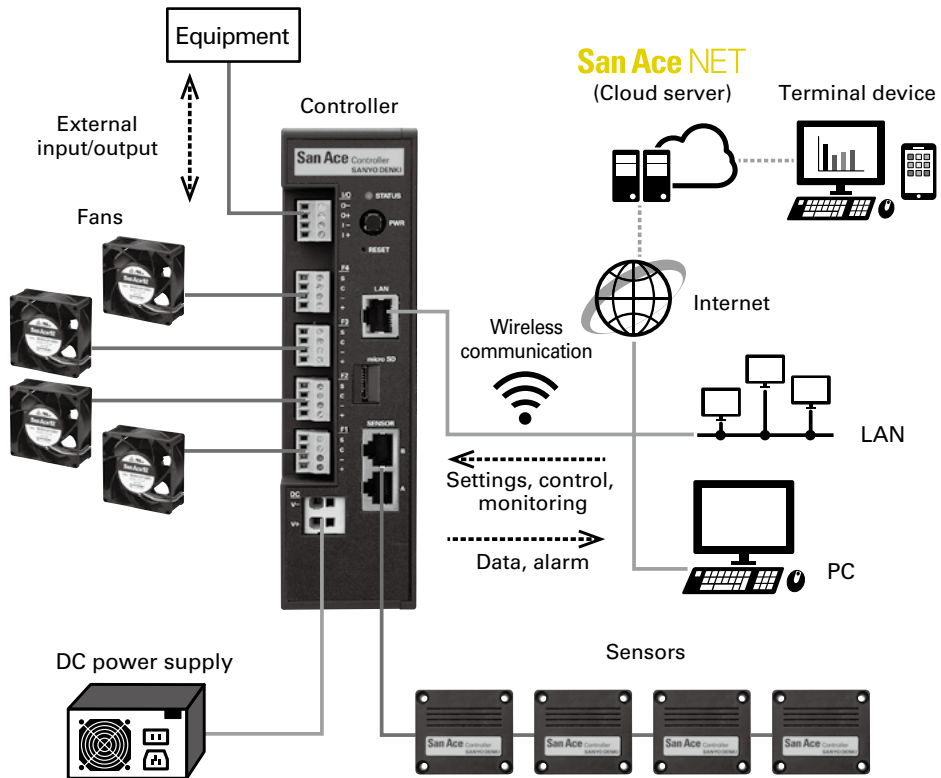
(1) Use a UL Class 2 power supply. (2) For use of this product alone, at 20°C ambient temperature

(3) Use our dedicated sensors (options). (4) Available channels: Ch. 1 to 11

## Front View



## System Configuration

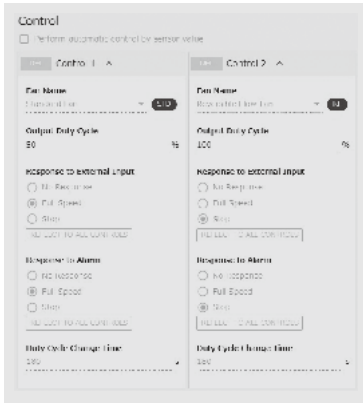


## Graphical User Interface (GUI) Screens

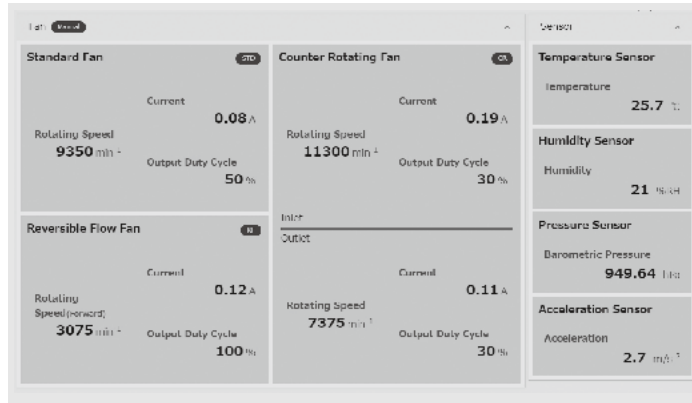
Settings, control, monitoring, and data download can be done through web browsers.

### Sample screens

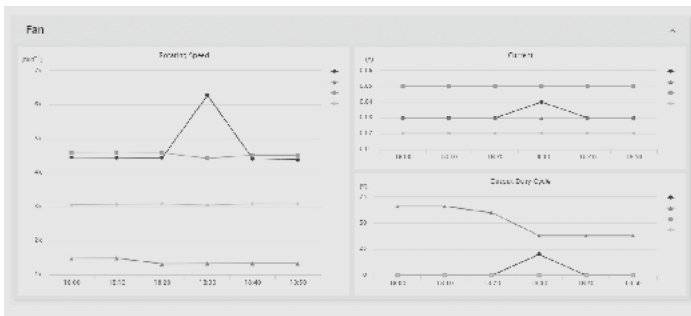
#### Control settings



#### Measurement data



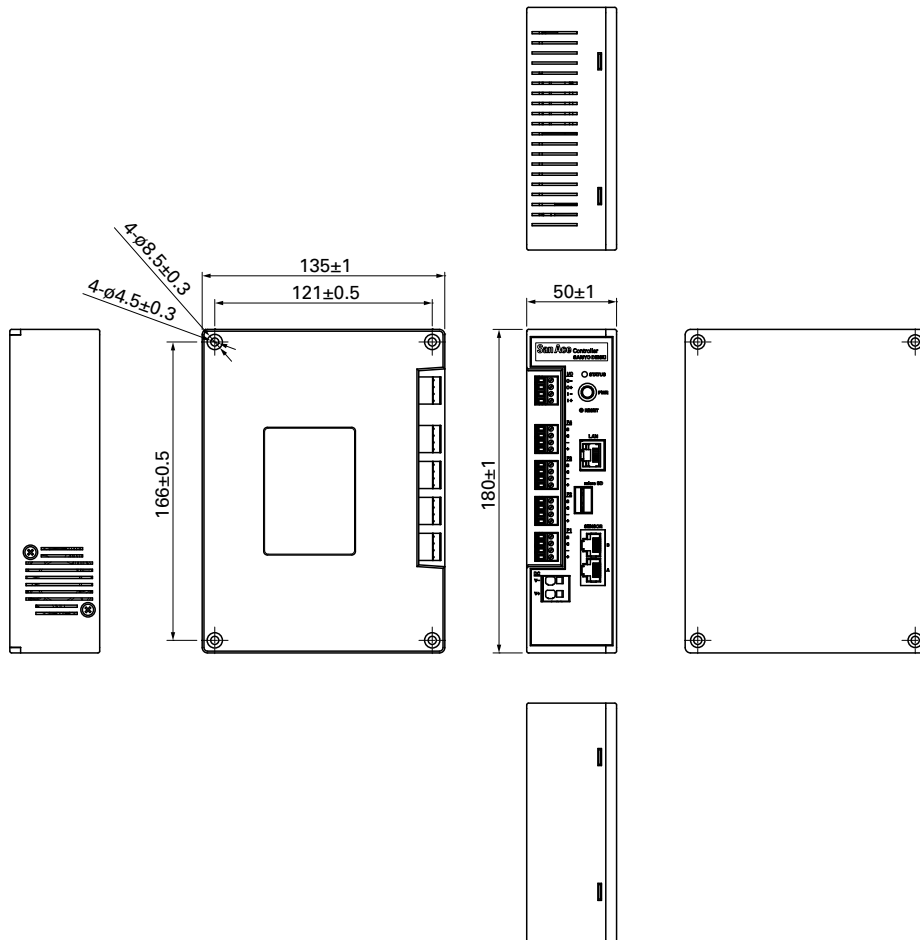
#### Graphs



#### Alarms

Alarm Type	Date	Action
F1 Fan Rotational Speed	2023/02/12 09:28:26	RELEASE
F2 Fan Rotational Speed	---	RELEASE
F3 Fan Rotational Speed	---	RELEASE
F1 Fan Current	2023/02/11 09:38:26	RELEASE
F2 Fan Current	---	RELEASE
F3 Fan Current	---	RELEASE
F4 Fan Overvoltage	---	RELEASE
F5 Fan Overvoltage	---	RELEASE
F6 Fan Overvoltage	---	RELEASE

## Dimensions (unit: mm)



## Options

- Sensors

Sensor type	Temperature / Humidity sensor	Air pressure sensor	Accelerometer
Model no.	<b>9CT1-T</b>	<b>9CT1-P</b>	<b>9CT1-A</b>
Measurement range	Temperature: -20 to +70°C Humidity: 20 to 85% RH <sup>(1)</sup>	Air pressure: 800 to 1100 hPa	Acceleration: 0 to 60 m/s <sup>2</sup> <sup>(2)</sup>
Operating temperature range [°C]	-20 to +70		
Operating humidity range [% RH]	20 to 85 <sup>(1)</sup>		
Size [mm]	53 (W) × 46 (D) × 22 (H)		
Mass [g]	35		
Material	Casing: Plastic		

(1) Non-condensing (2) Total acceleration from three axes



- Dimensions (unit: mm)

