

Smart Wireless Sensor

G7

Secure and Reliable Monitoring



Windows / iOS / Android Monitoring App
64 wireless temperature & humidity sensors
Long battery operation period
1200 meter wireless distance

Wireless Sensor

Wireless temperature sensor
Wireless humidity sensor
Average one year battery life
Transmission interval (5s ~ 3hrs)

Free App

Easy to use App for daily use
* Wireless Client for Windows,
iOS & Android
* Data Receiving Centre Software

Professional

Sensor high/low alarm levels
Alert user over LAN or Internet
Data storage in local computer
Support Modbus TCP

Applications



Industrial & Manufacturing

Recording and analysis of temperature, humidity situation in rural and location where cabling is difficult or impossible.

Long distance 1.2km is ideal in this application.



Data Centre & Cold Storage

Temperature, humidity and power monitoring are critical in data centre, telecom exchange centre and cold food storage.

Update temperature as fast as every 5 seconds ensure the secure condition.



Medical or Environmental

Alert users whenever temperature or humidity is higher or lower than user preset level.

Either TCP alert or email alarm by Wireless Client App is supported.

How user receives the sensor data?



G7 Wireless Sensor sends real time data wirelessly through radio wave to the Base Station.
Base Station collects the measurement of all wireless sensors, and uploads to central computer.
 Both station and sensor are easily configured by setup software via USB port.

Free App

Wireless Client Lite for Windows (Desktop & Touchscreen) for iOS & Android Phone

It receives data from Base Station over LAN or Internet, and displays both live and historical data in graphics.

Data records are saved into local storage for comparison or report generation.

Dashboard display mode gives an overview of 64 sensors reading on one single screen.

Setup is simple. Select Station ID, enter password and get the data instantly.

Alarm

On Screen Alert

User is alerted when high/low temperature, humidity or low battery voltage is triggered.

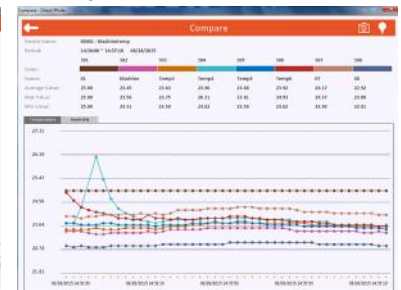
Alarm Email

Wireless Client provides on screen alarm and audio buzzer. It can also send alarm email.

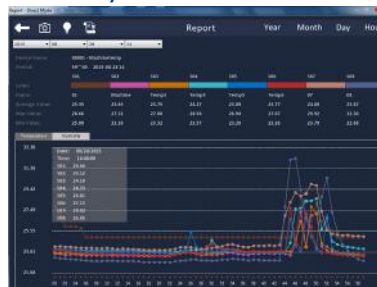
Live Data & Alarm Mode



Comparison Mode



History Mode



Live Alarm



Report Mode



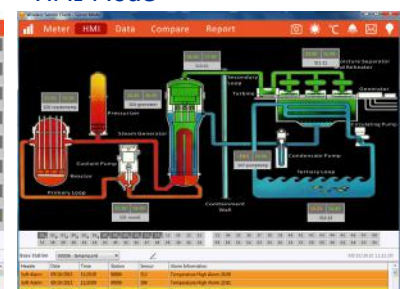
Analysis Mode



Dashboard



HMI Mode



Wireless Sensor

Temperature Sensor:	-55 ~ 125 °C (+/- 0.5°C)
Combo Sensor (G7-H2)	
Temperature:	-40 ~ 125 °C (+/- 0.3°C)
Humidity:	0 ~ 100%RH (+/- 2%)
Upload Interval:	5s ~ 3 hours
Wireless Distance:	1200 meter (unblock)
Sensor ID:	User programmable 5 digits
RF Wireless:	433MHz (license free)
RF Power:	< 20dBm
Operation Rating:	80mA (data transmission)
Standby Rating:	~3.0uA (sleep mode)
Operating Voltage:	3.0~3.6V DC
Battery:	3400mAh
Battery Life:	~ 1.5 year (10 min upload)
Dimension:	80 x 80 x 28 mm
Operating Temperature:	-20 ~ 75 °C

Base Station

Upload Interval:	5s ~ 3 hours
Protocol:	TCP/IP Network
Network Port:	10/100M Ethernet
	Fixed & Dynamic IP
Industrial Support:	Modbus TCP protocol
RF Wireless:	433MHz, 4.8Kbit/s
RF Address/Band:	255/15
Operating Voltage:	5 ~ 9V DC
Rating:	< 130mA
Operating Temperature:	-15 ~ 75 °C
Dimension:	70 x 65 x 35 mm

EMC Compliance: EN300220, EN301489, EN60950
Certificate: FCC, RoHS

G7-BS Base Station



Wireless Sensor

- ☑ Internal battery
- ☑ RF antenna Internal or External adjustable
- ☑ Waterproof

G7-TM Sensor

- ◆ Internal Temperature Sensor



G7-T2 Sensor

- ◆ External Temperature Probe with 2m cable



G7-TX Sensor

- ◆ External Temperature Probe with 100mm steel housing



G7-H2 Sensor

- ◆ External Temperature & Humidity Combo Sensor, 20cm cable



Easy Installation

- 1) Connect Base Station to Internet via router
- 2) Setup network properties
- 3) Download Wireless Client App
- 4) Temperature Humidity Graphics View

G7-BS Base Station

- ◆ Receive Wireless Data from sensors
- ◆ Upload data via LAN/Internet to central

Wireless Sensor (Extended Power)

Battery Capacity:	14000mAh
Battery Life:	~ 5 years (10 min upload)
Dimension:	115 x 90 x 55 mm
Operating Temperature:	-20 ~ 75 °C

Wireless Sensor (Extended Power)

- ☑ Internal high capacity battery
- ☑ External RF antenna
- ☑ Wall Mounted ready
- ☑ Waterproof



Free Software

- 1) Setup Software
- 2) Wireless Client App for Windows/iOS/Android
- 3) Data Receiving Centre Software



G7-T2Ex

- ◆ External Temperature Probe with 2m cable

G7-TXEx

- ◆ External Temperature Probe with 100mm steel housing



G7-H2Ex

- ◆ External Temperature & Humidity Combo Sensor, 20cm cable



How Wireless Sensor Client works?

<Direct Mode - free bundled>

- Each base station receives data from max. 64 wireless sensors
- Each base station uploads sensors to one single client user
- Each single client user accesses max. 2 base stations data simultaneously
- Local storage of incoming data from base stations

Alarm

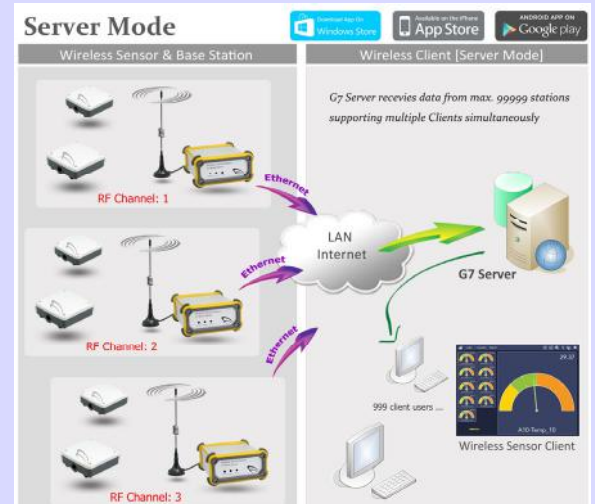
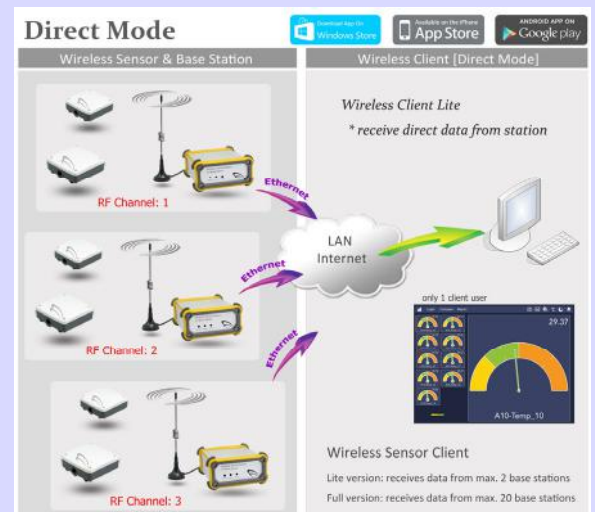
- Alarm email delivered from Wireless Client PC
- Single set of temperature humidity alarm setting

<Server Mode - bundled with G7 Server package>

- Each base station receives data from max. 64 wireless sensors
- G7 Server receives data from max. 99999 base stations simultaneously
- Max. 999 client users can retrieve data from Server simultaneously
- Each client user can retrieve 20 base stations data simultaneously
- Access of both live and historical data from Server

Alarm

- G7 Server delivers alarm Email and SMS
- Independent temperature humidity alarm setting of each user
- Remote alarm configuration by administrator



Case Reference for Direct Mode

Single Greenhouse

Wireless sensors are installed in each greenhouse.
 Each base station is responsible for monitoring one greenhouse.
 iPad is connected to base station on LAN, and displays the live temperature and humidity reading.
 Alarm email of high/low temperature or humidity is sent from iPad to users.



Multiple Greenhouses

Wireless sensors are installed in each greenhouse.
 Each base station is responsible for monitoring one greenhouse.
 All base stations and iPad or PC are connected in local network (LAN).
 iPad or PC displays the live temperature and humidity reading.
 Alarm email of high/low temperature or humidity is sent from iPad or PC to users.



Remote Monitoring Greenhouses

Wireless sensors are installed in each greenhouse.
 Each base station is responsible for monitoring one greenhouse.
 All base stations are connected to Internet.
 Internet connected iPad or PC displays the live temperature and humidity reading.
 Alarm email of high/low temperature or humidity is sent from iPad or PC to users.

