



# G7-BS

## IoT/M2M Base Station

### Optimized RF



G7 is a wireless sensor series designed for M2M and IoT applications. It features low power consumption optimized for battery-powered operation and a compact form factor. The system consists of a central base station that supports connectivity with multiple wireless sensors, enabling scalable and reliable deployments.

**G7-BS** supports 4 variants of wireless sensors:

- ❖ **Wireless Temperature & Humidity Sensor**  
Single Temperature, Dual Temperature, Temperature & Humidity
- ❖ **Wireless RS485 Modbus Sensor**  
Offers dual data registers communication via RS485 Modbus protocol
- ❖ **Wireless Analog Sensor**  
Embedded with single analog channel
- ❖ **Wireless Digital Detector**  
Detecting dual alarm channels



#### Key Benefits

- Low-power, high-efficiency RF module
- License-free 433 MHz ISM band
- Wireless range up to 1200 m (LOS)
- Up to 64 sensor nodes per base station

#### System Design

- Turnkey, deployment-ready design
- Scalable multi-sensor architecture

#### Development Tool

- TCP Modbus for BMS integration
- Open API for third-party applications
- REST API for custom web platforms

#### Applications

- IoT farming, Industrial facilities
- Environmental monitoring

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## IoT/M2M Base Station Optimized RF

### G7-BS 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.

### Features

- \* Programmable Server IP or DDNS, and port
- \* Protocol TCP/IP
- \* 100M Ethernet Port, Modbus TCP
- \* Programmable data upload interval: 5s ~ 4hr
- \* Programmable High/Low Alarm Level
- \* Max. 64 sensors per base station
- \* RF 433/868/915MHz, 4.8Kbit/s
- \* 255 RF Address, 15 RF Band
- \* Internal 4MB memory ~ 30000 records (G7-BS+)

### Characteristics

- Supply Voltage: 5VDC
- Storage Temperature: -20 ~ 75 C
- Operating Temperature: -20 ~ 75 C
- Standby: 50mA
- PVC case
- 110 x 95 x 45mm



### Power Options

- 1) AC-DC power adaptor (default)
- 2) Solar controller built-in
- 3) Battery Mini-UPS

### G7 Wireless Sensor

It sends real time data wirelessly through radio wave to the Base Station.

It consists of 4 types of sensors.

#### 1) Wireless Temperature Humidity Sensor

- Single temperature probe
- Dual temperature probe
- Temperature & humidity probe

#### 2) Wireless Analog Sensor

- Single analog channel
- 4-20mA or 0-5V signal input

#### 3) Wireless Modbus Sensor

- RS485 Modbus, 2 x floating points

#### 4) Wireless Digital Detector

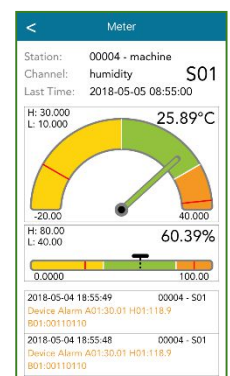
- Dual channel alarm input
- Water leakage detector

### Software bundled

- Setup Software
- Data Receiving Centre Software
- TCP Modbus Tool
- G7 Client Lite [Direct Mode]  
Win11, iOS, Android Phone

### G7 Server Client Software

- Paid Add-on
- Central Management of 99999 base stations
- Simultaneous 999 remote client connections



### Approvals

FCC, CE Compliant: EN300220, EN301489, EN60950