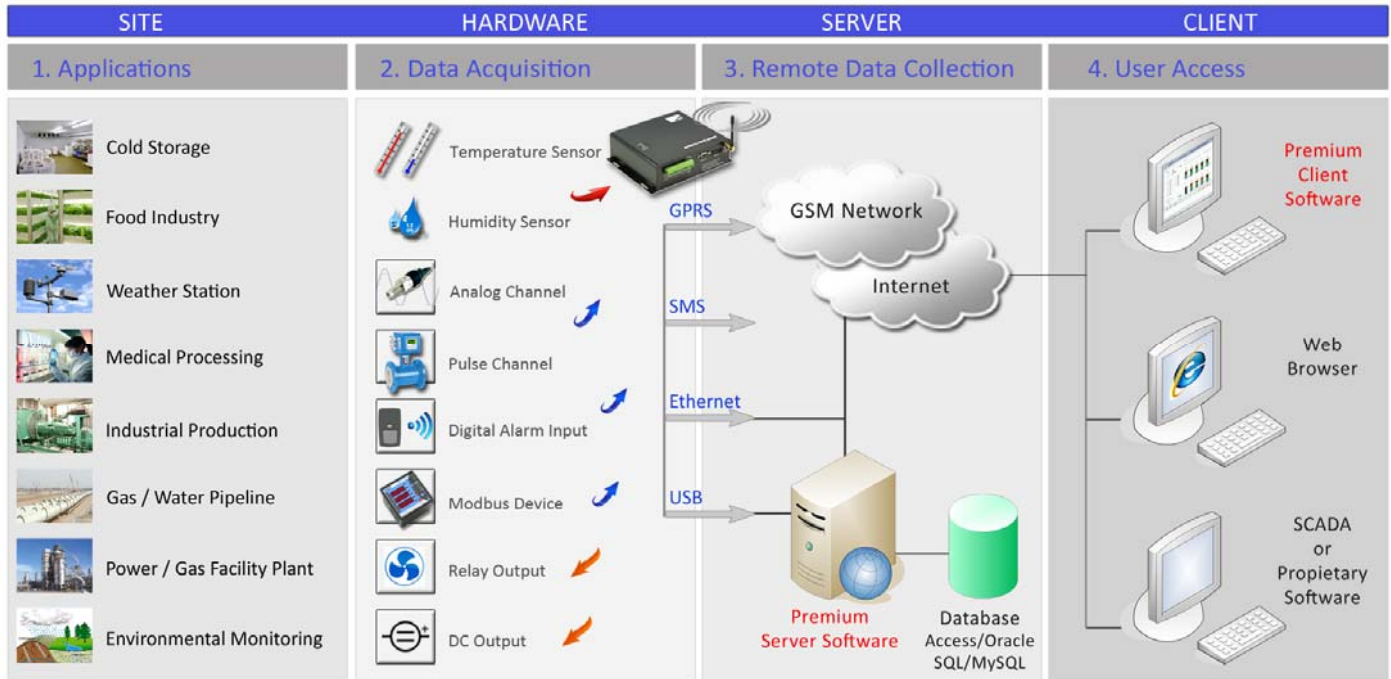




Sensors, Transducers, Accessories

connecting to Data Loggers ...

Measuring devices e.g. sensors and accessories are as important as a Data Logger. It provides reliable and accurate data source for monitoring.



Special points of interest:

- All sensors, transducers and accessories are certified to work with 3gtrack data loggers
- Some models of data loggers are designed dedicatedly to measuring devices in this catalogues
- Please specify your application or ask our engineers' advice for recommended models

Tracking

- * Environmental Temperature, Humidity
- * River Temperature
- * Wind Speed, Wind Direction
- * Rain Level
- * CO2 Content
- * Water Flow

Inside this issue:

Temperature Sensor	2
Temperature & Humidity Sensor	2
CO2, UV Sensor	3
Wind Speed & Direction Sensor	3
Rain Gauge	3
Power Transducer	4
Solar Energy System Monitoring	4
Level Transducer	4
Other Sensors	4



Certified sensors or measuring devices for better compatibility and data accuracy.
All sensors can be connected to GS828, GSMS and SMSPro series directly.

Sensors for TEMP or HUM channel

All are powered by GS828 internal 5V DC output

Digital Temperature & Humidity Combo Sensor

TH_V3

Temperature Sensor: DS18B20
Measuring Range: -50 ~ 125 °C
Accuracy: +-0.5 °C

Humidity Sensor: CHM-01A
Measuring Range: 0 ~ 100% RH
Accuracy: +- 3% RH

Operating Voltage: 5VDC
Enclosure: PVC Housing
Cable Length: standard 2 meter
Extended Cable: > 150 meter



Digital Temperature Sensor

T_V2

Sensor: DS18B20
Measuring Range: -50 ~ 125 °C
Accuracy: +-0.5 °C
Operating Voltage: 5VDC
Enclosure: Steel Housing
Cable Length: standard 2 meter
Extended Cable: > 150 meter



Industrial Grade

Pt100 Temperature Transducer

T_A2

Aluminum Housing

T_A1

PVC Housing

Sensor: pt100
Measuring Range: -200 ~ 400 °C
To be specified by user
Accuracy: +-0.2 / 0.5 °C
Operating Voltage: 12 or 24VDC
Extended Cable: > 100 meter
Output Signal: 4~20mA



Sensors for AD analog channel

Some are powered by GS828 internal DC output

H_A3

Humidity Transducer

Sensor: CHM-03A
Measuring Range: 0 ~ 100%RH
Accuracy: +-2% RH
Operating Voltage: 24VDC
Enclosure: PVC Housing
Extended Cable: > 100 meter
Output Signal: 4~20mA



T_A3

Temperature Transducer

Sensor: pt1000
Measuring Range: 0 ~ 80 °C
Accuracy: +-0.5 °C
Operating Voltage: 12 or 24VDC
Enclosure: PVC Housing
Extended Cable: > 100 meter
Output Signal: 4~20mA

Some sensors can be powered by the data logger's internal voltage output.

GS828H & GS828L Internal 5VDC Output: 1A
GS828L Internal 24VDC Output: 1A

T-V2, TH-V3 Current Rating: 1~3mA
T-A2/3, H-A2/3 Current Rating: 1~3mA



WS100 Wind Speed Sensor



WD100 Wind Direction Sensor

Specification	Wind Speed & Direction Sensor	
	Wind Speed Sensor	Wind Direction Sensor
Range	0~45m/s or 75m/s	0~360°
Accuracy	+/- (0.3 + 0.03V) m/s	0.1% Linear
Resolution	0.1 m/s	1°
Start Up Wind Speed	< 0.5 m/s	< 0.8 m/s
Output	Square Wave Pulse	0~5k W (+- 15%)
Transducer Output	4 ~ 20mA	4 ~ 20mA
Operation Voltage	DC 24V or 12V	DC 24V or 12V
Max. Rating	10mA	10mA
Operation Temperature	-40 ~ 50 °C	-40 ~ 50 °C
Weight	< 0.5kg	< 0.5kg

**Weather Station
Data Logging System Sensors**

Sensors are directly connected to AD channel of GS828 Data Loggers.

It will be powered by the data logger internal voltage output.

In sleep mode, the power will be turned off automatically by the data logger to save energy.



RST323 Tipping Bucket Rain Gauge

Specification	Tipping Bucket Rain Gauge
Sensor type:	Tipping bucket
Output:	0.1 second switch closure
Switch:	Sealed reed switch
Sensitivity:	1 tip per 0.01", 1 tip per 1 mm, or 1 tip per 0.25 mm
Accuracy:	± 2% up to 2"/hr
Contact rating:	3 watts, 0.25 amps, 24 Vdc
Size:	8" dia x 15" high
Mounting:	3 legs, 1/4" diameter bolt holes on 9-1/2" diameter bolt circle
Weight:	3kg
Material:	Steel

UV Sensor



This device is built with UV sensor in weather proof housing.

Measuring Range:	0 ~ 200K lux
Accuracy:	+/- 3%
Operating Voltage:	24VDC
Output:	4~20mA
Enclosure:	PVC IP65

CO2 Content Sensor



This device is built with CO2 sensors in weather proof housing.

Measuring Range:	0 ~ 5000ppm
Resolution:	+/- 10ppm
Accuracy:	+/- 5%
Operating Voltage:	24VDC
Output:	4~20mA
Enclosure:	PVC IP65

GS828-WS provides one single solution of logging temperature/humidity/rain fall/wind speed/wind direction for weather station monitoring.

Level Transducer [Pressure Type]

- * Water/Oil Level Transducer
- * IP65 Enclosure
- * 0-1, 2, 5, 20, 200 m range
- * 12~24VDC power
- * Output: 4~20mA
- * Operating Temperature: -40 ~ 80 °C
- * Optional anti-corrosive enclosure
- * Accuracy: A (1%), B (0.5%), C (0.25%)



* Screw in type



* Drop in type



* Drop in type
* Anti-corrosive

Ultrasonic Level Transducer

Measuring Range	0 ~ 10 meter, optional 20/50m
Accuracy	0.25 ~ 0.5%
Resolution	3mm or 0.1%
LCD display	2 rows
Analog Signal	4 ~ 20mA, 250 ohm
Relay Output	2 x AC250V, 8A or DC30V, 5A
Power Source	24VDC or 220VAC
Operation	-20 ~ 60 °C
Enclosure	meter – IP65, sensor – IP68

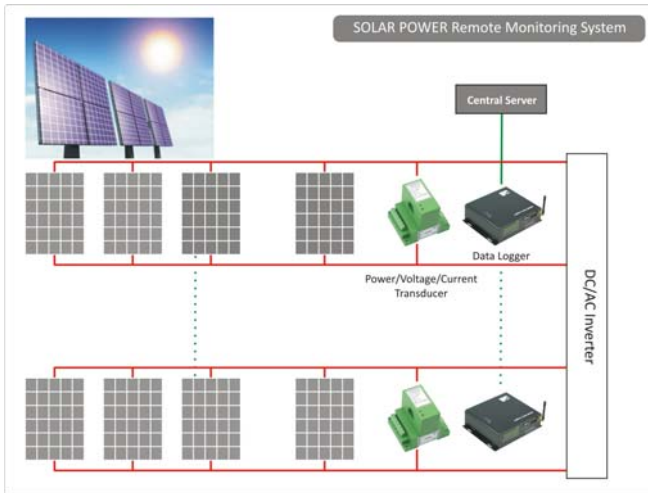


Soil Humidity Sensor

Measuring Unit:	% (m3/m3)
Range:	0 ~ 100%
Signal Output:	4~20mA
Measuring Area:	90%
Diameter/ Height:	3cm / 6cm
Material:	anti-corrosive ABS PVC
Probe:	Stainless Steel



Solar & Wind Power Monitoring & Logging System



- * GPRS Modbus Data Logger
- * Voltage/Current/Power Transducer

Multi-parameters Transducer

1. Measuring AC or DC Voltage, Current, Positive or Negative Power
2. Designed for power or wind power generating system
3. Range: 0 ~ max. 1000V, 0 ~ 500A
4. Accuracy: 0.2
5. RS485 Modbus standard interface



More sensors, transducers or meters can be connected with GS828 via Modbus RS485 port.

1. Water Flow Meter (pulse type, or RS485 type)
2. Power Meter
3. Current/Voltage/Power Transducer
4. Gas Flow Meter



Water Flow Meter
Pulse or Modbus RS485 Type



Power Meter
Modbus RS485