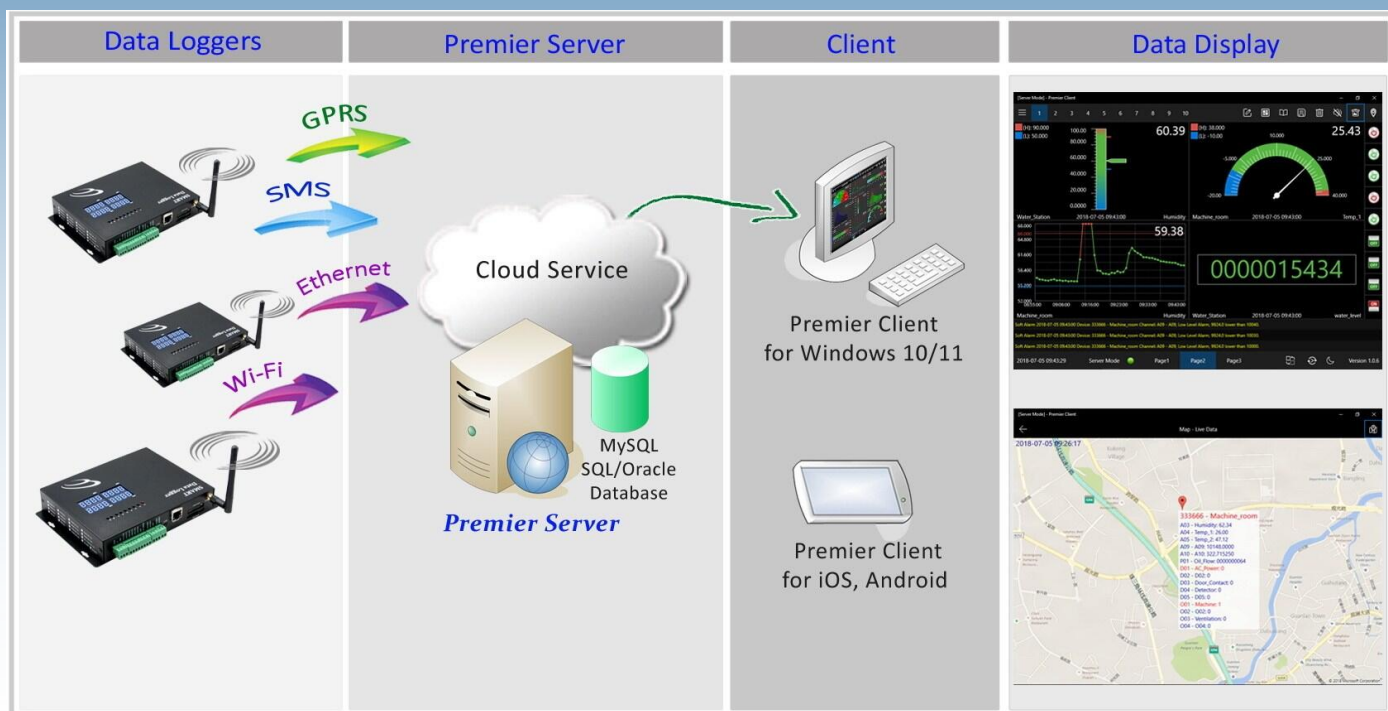


Premier Server Client Software

Cloud Server for Smart Data Logger



Premier Server is dedicatedly developed for large scale data application.

1. Receive data from Data Loggers in UDP or TCP via GPRS, SMS, Wi-Fi and Ethernet
2. Support Cloud Services e.g. AWS, Azure
3. Management of data loggers, clients and database
4. Management of data and alarm
5. Alarm level setting for individual channel
6. Sending Alarm Email & Alarm SMS
7. Support both Fixed IP & Dynamic Domain Name
8. User Programmable Formulas e.g. rain volume calculation
9. Built-in Tank Volume Formulas for different shapes and sensor types, and Flow Volume Formulas [optional]
10. Support 3 main types of database:
 - MYSQL, Oracle, SQL Server
11. Support redundant databases
12. Data export to mdb, csv, xml format
13. Handling thousands incoming data simultaneously [patented]
14. Support max. 999999 data loggers and 99 clients in one group
15. Support max. 999 groups in one single hosting
16. Support max. 99 groups of alarm emails and phone number

Premier Client displays live, historical data and alarm tracking in graphics & listing mode.

1. Retrieve data from Server Database
2. Support Google Map and Windows Map
3. Graphics Display of Live Data, Historical and Statistical Data
4. Live Data Tracking in day/month/year for real time analysis
5. Alert user via on screen display and alarm email
6. Support simultaneous display of multiple data loggers
7. Data export to csv or SQLite
8. Support 6 display modes:
 - Split Screen (chart & meter)
 - HMI (Human Interface Machine)
 - Line Chart (a number of channels in comparison)
 - Data Listing
 - Dashboard
 - Google and Microsoft Map

Platforms

1. Premier Client for Windows 11
2. Premier Client for iOS (iPad, iPhone)
3. Premier Client for Android Phone
4. Premier Viewer for Windows (end user viewing tool)
5. Web Browser

Service Components

[UTC-06:00] 18/05/2018 02:33:40 | 192.168.0.70 - 58.250.152.166 | UDP : TCP : SMS : CLT :

Data Receiving Modules are developed as Windows Service Components for Windows 10, 2012, 2016 Server OS.

Services are independent, reliable and stable in server grade application.

1. UDP service - manages the incoming data and outgoing command via UDP protocol
2. TCP service - manages the incoming data and outgoing command via TCP protocol
3. SMS service - manages the incoming data and outgoing command via SMS
4. CLT service - manages the data and command with Client Software

By virtue of multi-threading technology, each service is capable of handling thousands of incoming data per second simultaneously.

This design is dedicated for Windows Server platform application.

Management of Data Loggers & Alarms

Device Manager | Device Channel | De

Device Setup

Device ID : 333111

Device Name : Temp_Monitor

Device Type : GSX8-HV-3GP

Analog Channel Soft Alarm

Analog Channel : A03 - A03

Level_Max Value : 2000

Level_2_Higher Alert : 1800

Level_1_High Alert : 1500

Level_1_Low Alert : 1000

Level_2_Lower Alert : 800

Level_Min Value : 300

Save Delete

Digital Input Channel Setup

Digital Input Alarm :

☒ Close Triggered Alarm (NO)

☐ Open Triggered Alarm (NC)

Save Delete

Central management of data loggers:

- Device ID & Name, Device Type, Password
- Central Alarm System independent of device hardware alarm
- Ready for Data of Analog, Digital, Pulse Channels, Relay Output
- Each data logger has its own set of alarm levels
- Each channel has its independent 2 levels high/low alarm levels
- Data Loggers Health Status

Device Manager | Device Channel | Device

Device Setup

Device ID : 333111

Device Name : Temp_Monitor

Enquiry Password : 999999

Setup Password : 888888

Phone Number : 18565689063

Device Type : GSX8-HV-3GP

Device UTC : UTC+08:00

Save

UTC Date Time Management:

- Auto Clock Synchronization of data loggers
- UTC time management of data loggers and client users
- Support worldwide implementation of data logging system

Alarm Alert of remote users

Premier Server alerts client users via:

- SMS alarm
- Email alarm
- Alert on Premier Client Software

Alarm Categories:

1. Sensor Channel data high/low alarm
2. Digital Alarm on/off alarm
3. Data Logger hardware defect
4. System Alarm e.g. database error
5. Data Loss in certain period

E-mail Manager | Phone Manager | Alert Setting | Time Zone | Grouping | Group List

Alarm Alert Setup

Device ID : 111555

Device Name : Data_Centre

Display Alert Interval : 05m

E-mail Alert Interval : 15m

Phone Alert Interval : 02h

Alarm Email Subject Format

☐ [1] Alarm - Data Logger ID:yyyyyy, Axx:aaaa

☐ [2] alarm

☒ [1] + [2]

Save

Device ID	Device Name	Enable Display Alert	Enable Email Alert	Enable Phone Alert	Display Alert Interval	Email Alert Interval
000006	000006	☒	☒	☒	01m	01h
000007	000007	☒	☒	☒	01m	01h
000008	000008	☒	☒	☒	01m	01h
000009	000009	☒	☒	☒	01m	01h
000010	000010	☒	☒	☒	01m	01h
111444	111444	☒	☒	☒	01m	01h
111555	Data_Centre	☒	☒	☒	01m	01h
111666	Machine_room	☒	☒	☒	01m	01h
333111	Temp_Monitor	☒	☒	☒	02m	30m
333222	333222	☒	☒	☒	01m	01h
333333	333333	☒	☒	☒	01m	01h
333444	333444	☒	☒	☒	01m	01h
555111	555111	☒	☒	☒	01m	01h

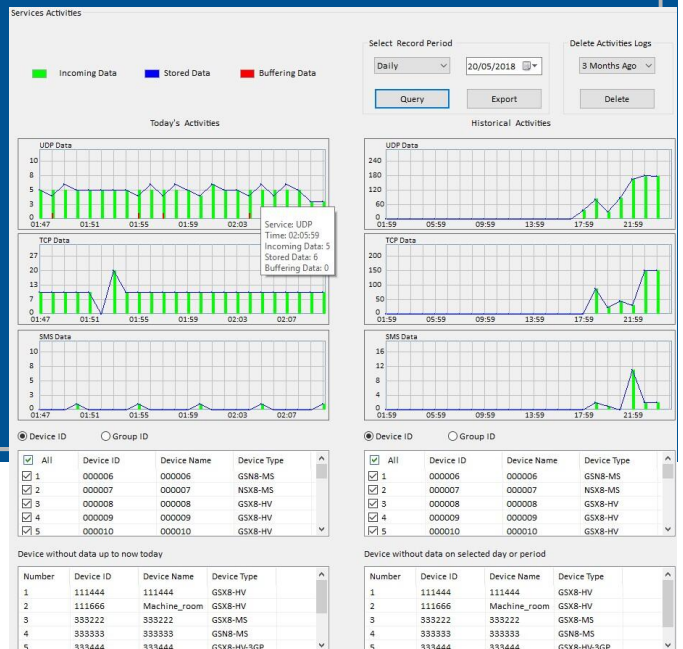
Monitor Server Loading

Premier Server keeps track of status, loading and performance of its data receiving service and database.

- Real time tracking of data incoming, buffer and saving
- Data buffering is an indication of system loading and data bandwidth usage
- Historical tracking of system performance for contingency plan
- Performance and Health Status tracking of individual data logger or groups of data loggers

Premier Server supports simultaneous port connection to a number of data loggers.

Our State of the Art Technology is capable of handling thousands of incoming data in a second.



Server Status & Logs

--	--	--	--	--

TCP Log Info

21-05-2018 01:12:53 TCP Service is started.
 21-05-2018 01:12:53 DB [localhost] connected.
 21-05-2018 01:12:53 TCP Service is starting.
 21-05-2018 01:12:52 TCP Service is stop.
 21-05-2018 01:12:15 TCP Service is started.
 21-05-2018 01:12:15 DB [localhost] connected.

Premier Server keeps track of its own activities of managing data loggers, service components, data, clients and alarms:

- Each server operation is logged with date time
- Powerful tool for system analysis and error handling

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Premier Server Status

[21-05-2018 00:20:53] -> SMS >> DB 1 connect .
 [21-05-2018 00:20:53] -> UDP >> DB 1 connect .
 [21-05-2018 00:20:53] -> CLT_Service is Started.
 [21-05-2018 00:20:52] -> UDP_Service is Started.
 [21-05-2018 00:20:52] -> SMS_Service is Started.
 [21-05-2018 00:20:48] -> TCP >> DB 1 connect .
 [21-05-2018 00:20:48] -> TCP_Service is Started

Alarm Display

[21-05-2018 00:19:33] -> Data Logger Soft Alarm Data, Device ID: 333111, Channel: A04, High/Low Level Alarm, High Level 1 Alarm: 1525.56939 higher than 1300.00
 [21-05-2018 00:16:36] -> Data Logger Soft Alarm Data, Device ID: 333111, Channel: A04, High/Low Level Alarm, High Level 1 Alarm: 1525.56939 higher than 1300.00

Central UTC date time management

Automatic Clock Synchronization

Enable: ☒

Type: ☒ UDP

☐ TCP

☐ SMS

Time: ☒ Daily

☐ Every Wednesday

☐ 3rd Day Every Month

Premier Server maintains central management of UTC clock on both data loggers and client users:

- Automatic clock synchronization of data loggers
- Central Maintenance of UTC clock for all data loggers and remote client users

Data Display in both Server & Client

Live Data

- * Auto Search and Filter in Station Name or ID
- * Selection of Normal Data and Alarm Data
- * Record Date/Time, Device ID, Sensor Data, GPS Data
- * Data Export as mdb for external report or analysis

Live Data History Data Statistical Data								
Query Setting Query Device ID Filter: 333111 333111 - Temp_Monitor Display Selection ☒ Normal Data ☒ Alarm Data			NO.	Client Code	Header	Device ID	Device Name	Record_Time
			801	GHG-XGY-GZG-JGI	STA	555111	555111	2018-05-20 20:13:00
			802	CKY-KCV-MVY-XUK	STA	333111	Temp_Monitor	2018-05-20 20:12:00
			803	GHG-XGY-GZG-JGI	STA	555111	555111	2018-05-20 20:12:00
			804	CKY-KCV-MVY-XUK	STA	333111	Temp_Monitor	2018-05-20 20:11:01
			805	GHG-XGY-GZG-JGI	STA	555111	555111	2018-05-20 20:11:00
			806	CKY-KCV-MVY-XUK	STA	333111	Temp_Monitor	2018-05-20 20:10:00
			807	GHG-XGY-GZG-JGI	STA	555111	555111	2018-05-20 20:10:00
			808	CKY-KCV-MVY-XUK	STA	333111	Temp_Monitor	2018-05-20 20:09:01

Live & History Data

- * Keep track of data record in daily/weekly/monthly/annual
- * Auto Search Station Name or ID
- * Selection of Normal Data and Alarm Data
- * Selection of historical data period
- * Data Export as mdb, cvs, xml for data analysis or backup
- * Background Data Export optimizes the server performance

Statistical Data

- * Real time calculation of statistic data based on live data
- * Auto Search Station Name or ID
- * Selection of Statistical Period
- * Statistic Data Export as mdb for data tracking and analysis
- * Server performs data statistic calculation in background
- * Report generation for Client app

Artificial Channels

Premier Server provides three Artificial Channels for more meaningful data presentation:

- It provides the user defined formula to work out rational values by data from different channels
- Compensation factor can be added into reading from pressure sensors
- Pulse rate can be worked out from dividing the pulse reading by time period

Artificial Channels

Device Type : GS828-H2

AC1 = $a * CH(x) + b * CH(y) + c$

AC2 = $m * CH(x) + n * CH(y) + r$

☒ AC3 = $s * [CH(x)(t) - CH(x)(t-1)] / P$

CH(x) = Channel : P01 - Pulse Counts

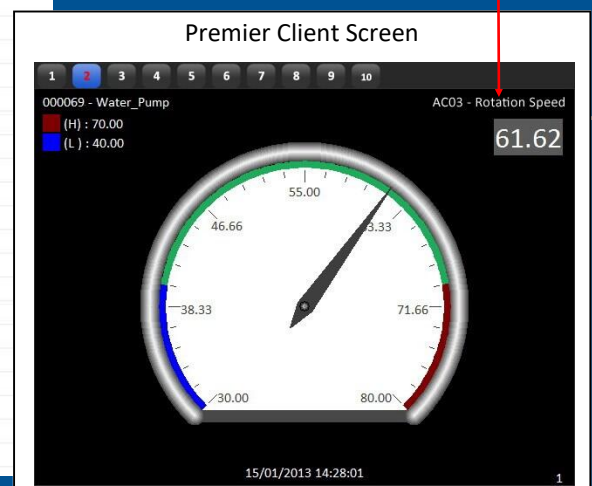
Multiple factor(s) : 2.60

CH(x)(t) : data of channel x in current record.

CH(x)(t-1) : data of channel x in previous record.

P : interval period between two sequential records (minutes).

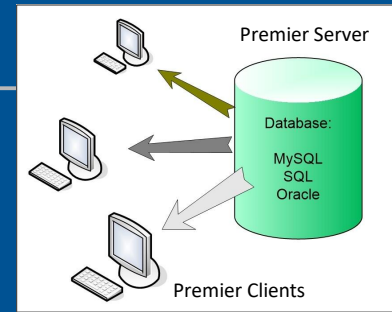
Pulse Counts is converted to volume per interval by user -defined formula.



Database Manager

Premier Server supports 3 major database types common in the market:

- Connection engines are integrated in Server Software
- Easy creation and connection of 4 types of database in only few steps
- Database test tool is provided
- Database Connection List is built
- Select different database connection at any time



Setup Assistant

Database Type

☒ MySQL

☐ SQL Server

☐ Oracle

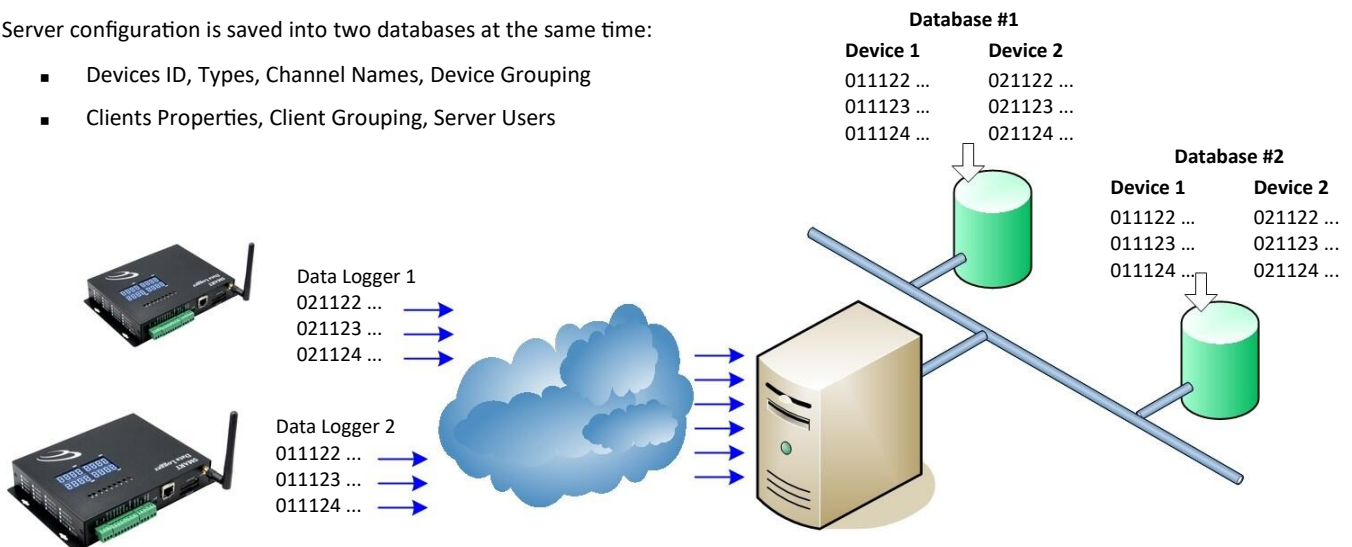
Database Redundancy

Data security is the key issue in telemetry industry. Premier Server provides fault tolerant architecture to protect data:

- Simultaneous data saving into two independent databases
- Automatic switching to health database when one of two databases is corrupted.
- Server and Database IP addresses are independent

Server configuration is saved into two databases at the same time:

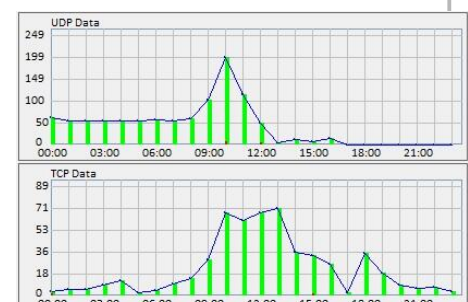
- Devices ID, Types, Channel Names, Device Grouping
- Clients Properties, Client Grouping, Server Users



Stress Test - Premier Performance

Premier Server Software undergoes stress testing on critical condition.

- It is capable of receiving data from >20000 data loggers simultaneously by creating a number of connections.
- Our patented "threading & multi-ports technology" handles thousands of incoming data records in seconds.
- Establishment of UDP and TCP multi-connections with thousands data loggers simultaneously.
- Connection of hundreds of client users at the same time allowing simultaneous data access
- Synchronized data saving into two databases over network.
- Real Time Status of incoming data, buffering and saving is displayed in graphics



Management of Remote Clients

Designed for
Cloud Hosting (e.g. AWS, Azure)

Premier Server is designed for hosting a number of user groups in one single server:

- Each client can be assigned for different groups of data loggers
- Each group of data loggers can be assigned for one corporate customer
- Enterprise can manage different plants, factories or stores using one server license
- Service company can manage different groups of data for a number of its customers independently and individually

Client user using free bundled Premier Client for Windows, iOS or Android:

- Access data from Server Database, Receive alarm from Server
- Display live & historical data in graphics mode e.g. HMI, Split Screen, or Line Charts or simple data listing

Premier Server allows devices assigned to groups of clients with its own alarm emails and sms phone number.

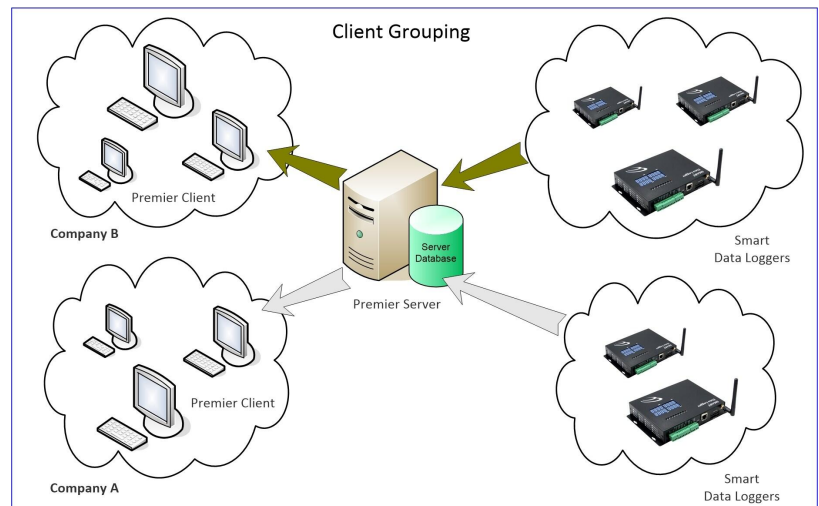
Client Grouping

Client Grouping allows different users to access their own group of devices data.

This feature is unique and important for:

- Performance, Traffics and Health Status of different groups can be tracked and exported for analysis
- Number of data records for each group or individual data loggers are recorded
- Hosting Companies charge their clients for monthly service fee
- Project Management Companies
- Service Providers

Client Group Assignment				Device Group Assignment			
Group ID	Group Name	Client ID	Client User	Group ID	Group Name	Device ID	Device Name
GC000	Branch_Ma...	10	user9			000001	Home_Temp
		11	user10			000002	Temp_Monit...
		12	user11			000003	Room1
		13	user12			000004	000004
GC001	Control_Ce...	1	gs828client	GC001	Control_Ce...	222111	Data_Centre
		2	user1			222222	Power_Station
		3	user2			222333	Power_Pump
		4	user3			222444	Power_Centre
GC002	Guard_Room					222555	Machine_Ro...
		5	user4			222666	Room_Temp

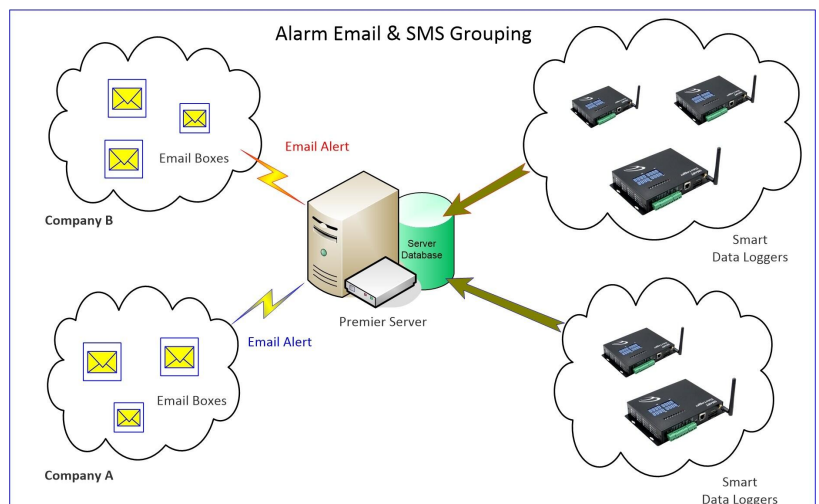


Alarm Email & SMS Grouping

Grouping allows alarms being sent to different groups of emails and phone numbers associated with their devices.

This feature is unique and important for:

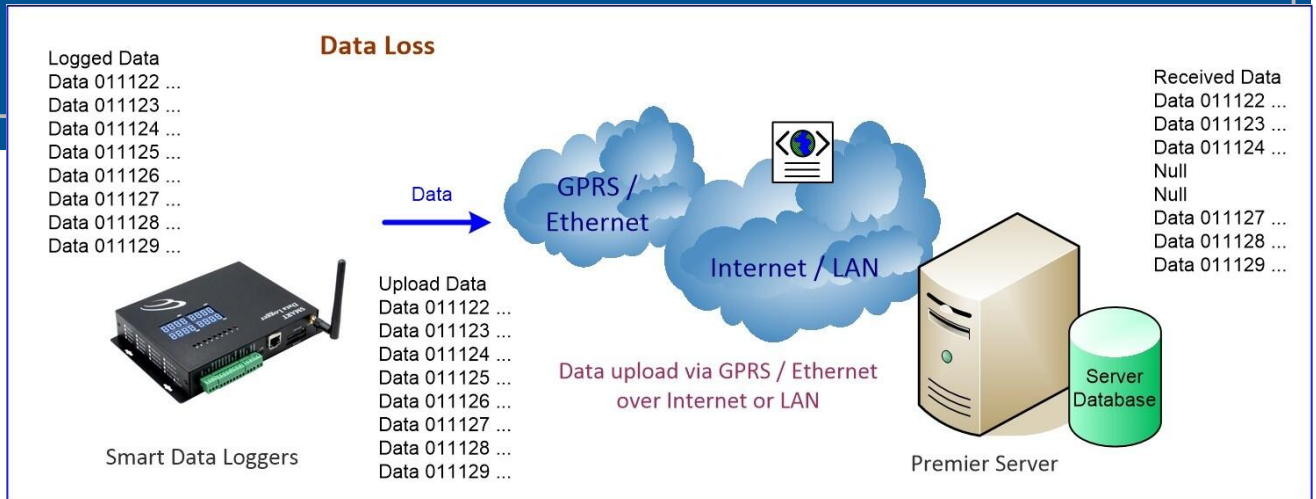
- Alerting different groups of users
- Project Management Companies
- Security Personnel Management



Data Recovery [patented]

Auto Data Recovery Function:

1. When live data is lost owing to GSM or Ethernet network problem, Server will automatically retrieve the lost data from the internal memory of data loggers once network resumes.
2. Premier Server keeps track of the data integrity and initiates the "Data Recovery" module when data loss is detected.
3. No human intervention is needed.

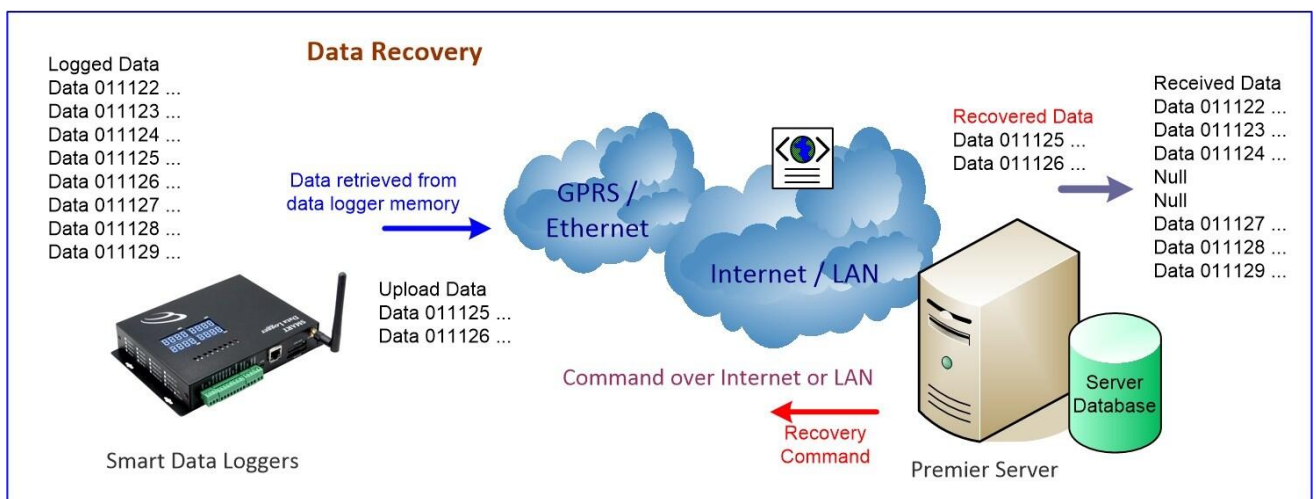


Patented Data Recovery Technology
provides 99.9% data integrity in real application

Mechanism

When Server realized some records loss in the database by checking the previous data records:

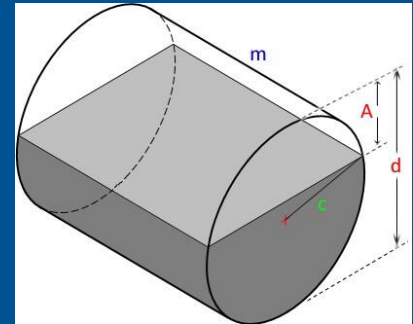
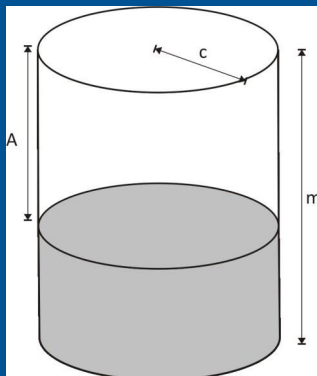
- Send command to retrieve all data records during the period
- GPRS Ethernet Data Logger receives command, retrieves those data records from its internal memory
- GPRS Ethernet Data Logger uploads the logged data records instantly
- Server receives the data records, and inserted into the database
- All data remains in time sequence
- All operation is completed automatically on background



Tank Volume Calculation

Total 10 formulas in calculating the tank volume based on level measurement:

1. Vertical Rectangular / Vertical Cylindrical Tanks
2. Horizontal Rectangular / Horizontal Cylindrical Tanks
3. Measurement unit in cm or inch result in litre, gallon or cm^3
4. Support both pressure type and ultrasonic type level sensors
5. Support 2 levels of tank volume high/low alarm



Device Manager									
Device Channel									
Device Soft Alarm									
Artificial Channel									
Device Type									
Channel Co-factor									
Channel Name	Channel ID	Formula	m	c	d	Device ID	Device Name	Device Type	A00
									A01
									A02
									A03
									A04
									A05
									A06
									A07
									A08
									A09
									A10

Flow Rate Calculation

(optional module)

Application

- Rain Gauge: Calculate the rain fall per hour, day, week, month
- Flow Meter: Calculate the total volume flow per hour, day, week, month

Pulse Rate						
Flow Rate						
Query Setting						
Query Device ID						
Filter:						
ALL						
Total Flow						
Periodic						
Daily						
Weekly						
Monthly						
Query Time						
Today						
Last 7 days						
Last 4 weeks						
Last 3 months						
Manual Select						
NO.	Device ID	Device Name	UTC	Start Time	Flowmeter P01	
1	333111	Temp_Monitor	UTC+08:00	2018-05-21 01:00:00	90.0000000	
2	111555	Data_Centre	UTC-08:00	2018-05-21 01:00:00	405.0000000	
3	333111	Temp_Monitor	UTC+08:00	2018-05-21 00:00:00	499940075.	
4	111555	Data_Centre	UTC-08:00	2018-05-21 00:00:00	1499943930	

Flow Rate (flow volume per interval) calculated based on pulse counter reading:

- Calculate the total volume flow based on volume per pulse
- Total Flow hourly, daily, weekly, monthly stored in database
- Allow users to display and export the history data of total flow per interval
- Premier Client displays the flow rate and alarm
- Support max. 4 types of flowmeter/raingauge, or pulse channels

Pulse Rate		Flow Rate		Flow Alarm	
Device Setup					
Device ID :	333666				
Device Name :	Machine_Room				
Device Type :	GSN8-HV-3GP				
Flowmeter Channel Soft Alarm					
Flowmeter Channel :	P01				
Total Flow					
Periodic					
Daily					
Weekly					
Monthly					
Level_Max Value :	500				
Level_2_Higher Alert :	400				
Level_1_High Alert :	300				
Level_1_Low Alert :	100				
Level_2_Lower Alert :	50				
Level_Min Value :	10				

Flow Alarm based on pulse counter reading:

- Support 2 levels of high/low flow volume
- Alarm on Total Flow hourly, daily, weekly, monthly
- Deliver both alarm email and SMS to users

Flow Volume Alarm

Data Tracking

Support Windows 10
Desktop & Touchscreen Mode

Premier Client allows user to track data from Server Database:

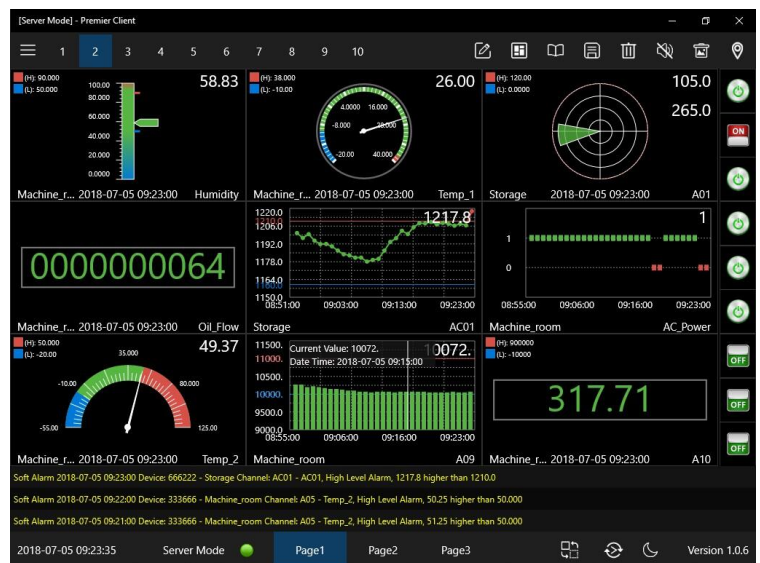
- Live & Historical Data Tracking in graphics mode
- Each client will be alerted when temperature or humidity is over the preset
- Client can be alerted by AD channel, Digital Input or AC Power Loss alarm.
- Each client is assigned to groups of data loggers
- Each client can monitor more than 300 channels in real time simultaneously

Key points:

- Max. 30 user profiles supported in each client station
- Max. 30 channels simultaneous real time display on single screen [HMI mode]
- Max. 300 channels live data update on background
- Supports [Direct Mode] and [Server Mode]
- Independent alarm levels of each individual channel [independent of Server and Data Logger Alarm]

Split Screen

- Supports 3x3, 2x2, 1x1 split screens
- Numeric Display of digital, pulse counter reading
- Graphics display of analog, temperature, humidity data
- More than 11 chart styles can be selected—meter, chart, numbers
- Wind Speed & Direction Plot
- Both Live & Historical Data are supported



[Server Mode] - Premier Client									
Header	Data Source	Device ID	Device Name	Upload Time	A01	A02	A03	A04	A05
STA	GPRS	666222	Storage	2018-07-05 08:48:00	105.0	265.0	64.81	26.43	26.87
STA	GPRS	222555	Water_Station	2018-07-05 08:48:00	00000	00000	00000	00000	00000
STA	Ethernet	333666	Machine_room	2018-07-05 08:48:01	00000	00000	57.27	28.56	27.31
STA	GPRS	666222	Storage	2018-07-05 08:48:00	105.0	265.0	64.90	26.50	27.00
STA	GPRS	222555	Water_Station	2018-07-05 08:47:01	00000	00000	00000	00000	00000
STA	GPRS	666222	Storage	2018-07-05 08:46:00	105.0	265.0	65.15	26.56	27.00
STA	GPRS	222555	Water_Station	2018-07-05 08:46:00	00000	00000	00000	00000	00000
STA	GPRS	222555	Water_Station	2018-07-05 08:45:00	00000	00000	00000	00000	00000
STA	Ethernet	333666	Machine_room	2018-07-05 08:45:00	00000	00000	57.70	28.75	27.50
STA	GPRS	666222	Storage	2018-07-05 08:44:00	105.0	265.0	65.45	26.62	27.06
STA	Ethernet	333666	Machine_room	2018-07-05 08:44:00	00000	00000	57.79	28.81	27.56

Soft Alarm 2018-07-05 08:48:01 Device: 333666 - Machine_room Channel: A09 - A09, Low Level Alarm, 10448, lower than 10600.
 Soft Alarm 2018-07-05 08:48:01 Device: 333666 - Machine_room Channel: A09 - A09, Low Level Alarm, 10448, lower than 10600.
 Soft Alarm 2018-07-05 08:45:00 Device: 333666 - Machine_room Channel: A09 - A09, Low Level Alarm, 10548, lower than 10600.

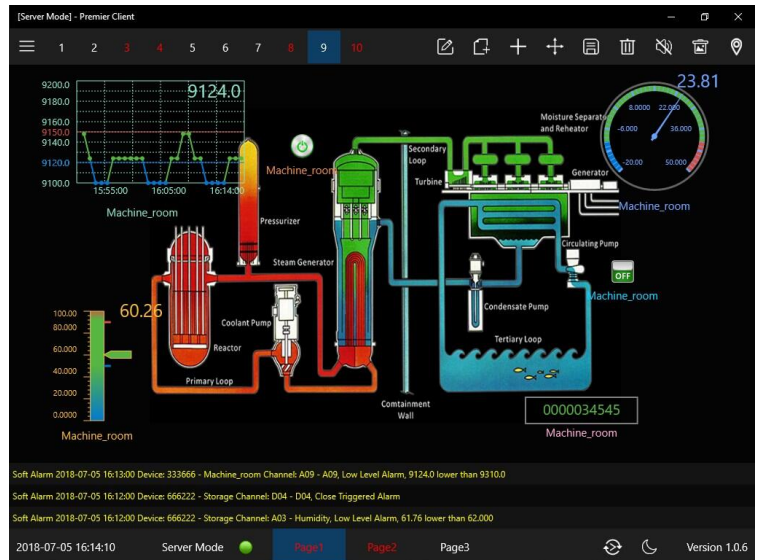
2018-07-05 08:48:40 Server Mode Page1 Page2 Page3 Version 1.0.6

Data Listing

- Max. 2000 records live data listing
- Max. 2000 records historical data query
- Data Logger and Channels user selectable
- Selectable period of history data
- Detail listing of record information
- Date/Time, Device Name & ID, All Channels

HMI Display

- Max. 30 channels in each background picture
- More than 12 chart styles for AD channels
- Wind Speed & Direction Plot
- Counter display for pulse channels
- LED for digital alarm channels
- Independent alarm levels for each channels

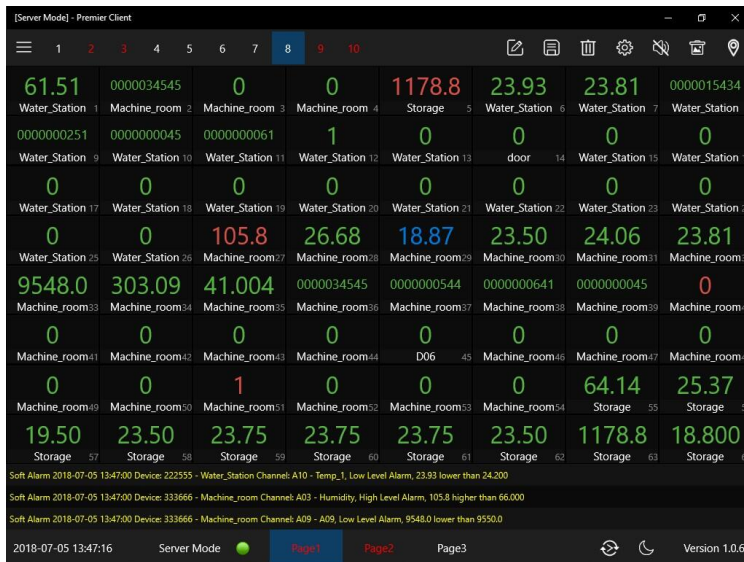


Dashboard

- Max. 64 channels in single screen
- Analog, Pulse, Temperature, Humidity
- Real Time Alarm display

Chart Comparison

- Max. 8 channels in single chart
- 8 channels of same data logger comparison
- 8 data loggers of same channel comparison
- Both Live & Historical Data comparison
- 3 chart styles user selectable
- Line or Column Chart style user selectable
- Data interval user selectable

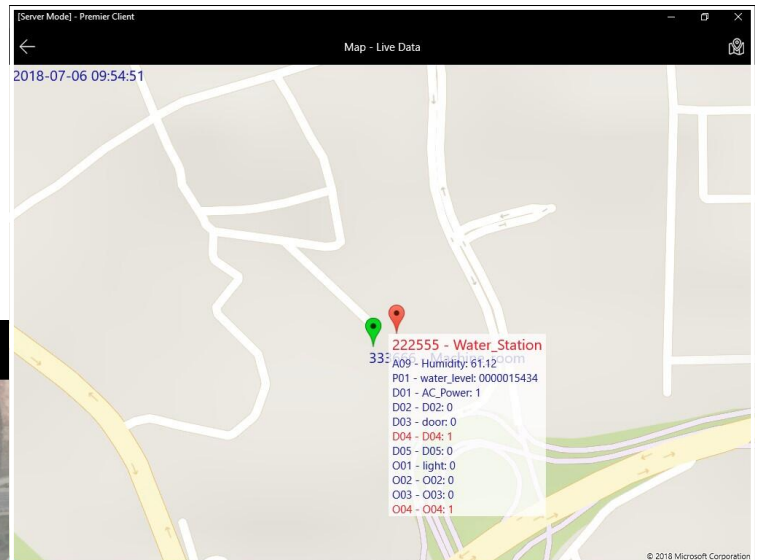
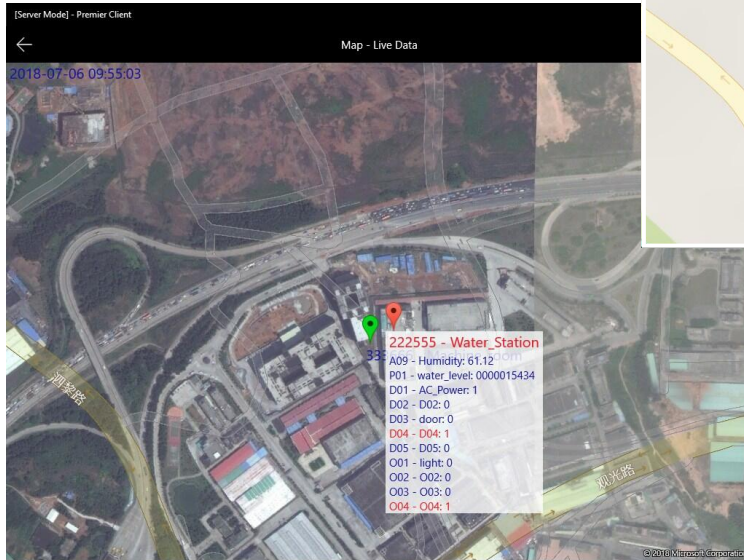


Premier Client for Windows 11

Map, Data Tracking, Statistics

GPS Map

- Max. 50 data loggers in one single map
- Display all channels of each device
- Data & Alarm Alert simultaneous display
- Satellite or Terrestrial view user selectable



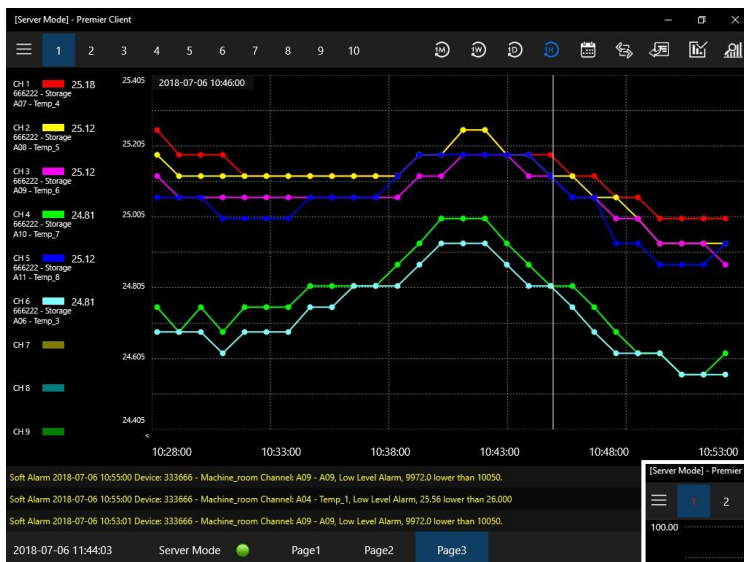
* GPS data available in models:

GSX8-HV-4GP, GSX8-MS-4GP

GSN8-HV-4GP, GSN8-MS-4GP

Live Data Tracking

- Keep track of live data trend in chart
- Selectable daily, weekly, monthly, annual
- Max. 8 channels in single chart
- Real time update of live data
- 3 chart styles user selectable
- Line or Column Chart style user selectable



Statistical Data

- Server calculate the statistical data on the incoming data instantly
- All statistic data is saved into database
- Based on hourly, daily, weekly, monthly, annual
- Average, Highest, Lowest Data
- Support Analog, Pulse, Temperature, Humidity



Point & Tap, Pinch & Zoom

Premier Client for iPad allows user to use iPad:

- HMI display of telemetry system
- Instant manual data checking
- Real time relay control on/off switch
- Works with and without Server

Features:

- Split Screen
- Line Chart Comparison
- HMI [Human Machine Interface]
- Data Listing
- Dashboard
- GPS Map

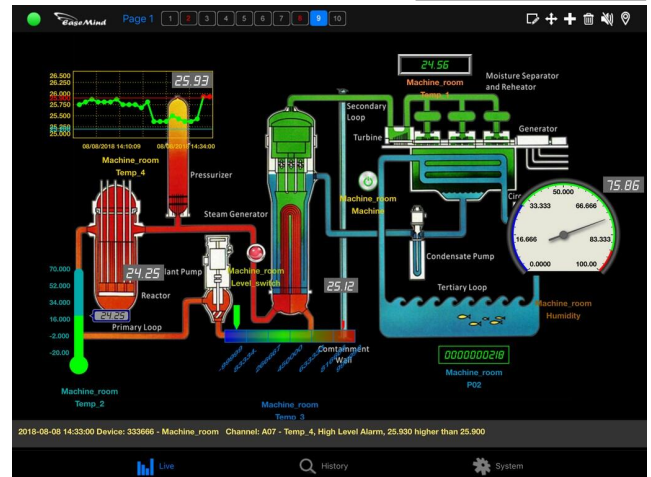


Premier Client for iPad
Easemind Technology Ltd.

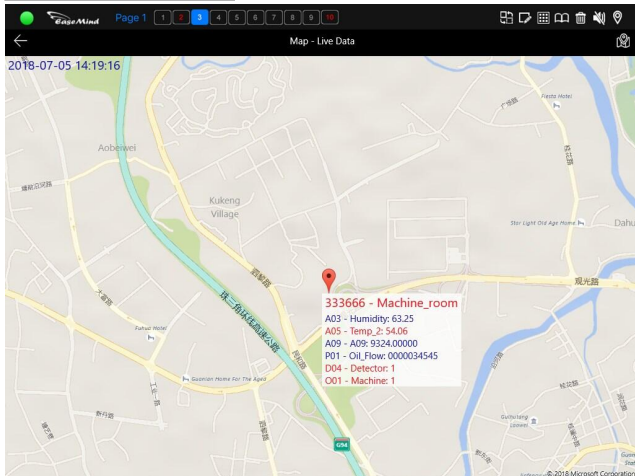
Split Screen



HMI Display



GPS Map



Line Chart



Dashboard



Data Listing

Num.	Type	ID	Name	Date	Time	A03	A04	A25	A26
1	STA	555222	Temp_Monitor	09/08/2018	09:59:00	55.78	28.06	2243.92667	,N
2	STA	555222	Temp_Monitor	09/08/2018	09:58:01	55.87	28.06	2243.92530	,N
3	STA	555222	Temp_Monitor	09/08/2018	09:57:00	55.87	28.00	2243.92509	,N
4	STA	555222	Temp_Monitor	09/08/2018	09:56:01	55.66	28.06	2243.93034	,N
5	STA	555222	Temp_Monitor	09/08/2018	09:55:00	55.96	28.06	2243.92750	,N
6	STA	555222	Temp_Monitor	09/08/2018	09:54:00	55.90	28.06	2243.92465	,N
7	STA	555222	Temp_Monitor	09/08/2018	09:53:00	55.69	28.06	2243.91875	,N
8	STA	555222	Temp_Monitor	09/08/2018	09:52:00	56.08	28.06	2243.92202	,N
9	STA	555222	Temp_Monitor	09/08/2018	09:51:00	56.05	28.06	2243.92433	,N
10	STA	555222	Temp_Monitor	09/08/2018	09:50:00	56.11	28.18	2243.92481	,N
11	STA	555222	Temp_Monitor	09/08/2018	09:49:00	55.84	28.18	2243.92972	,N
12	STA	555222	Temp_Monitor	09/08/2018	09:48:00	55.63	28.12	2243.92773	,N
13	STA	555222	Temp_Monitor	09/08/2018	09:47:00	55.41	28.12	2243.92687	,N
14	STA	555222	Temp_Monitor	09/08/2018	09:46:00	55.14	28.18	2243.92448	,N
15	STA	555222	Temp_Monitor	09/08/2018	09:45:00	55.06	28.18	2243.92981	,N
16	STA	555222	Temp_Monitor	09/08/2018	09:44:00	55.05	28.18	2243.92577	,N
17	STA	555222	Temp_Monitor	09/08/2018	09:43:00	54.92	28.25	2243.92239	,N
18	STA	555222	Temp_Monitor	09/08/2018	09:42:00	54.95	28.18	2243.92651	,N
19	STA	555222	Temp_Monitor	09/08/2018	09:41:00	55.20	28.06	2243.92732	,N
20	STA	555222	Temp_Monitor	09/08/2018	09:40:00	55.69	28.06	2243.92519	,N

2018-08-08 09:35:12 Device: 333111 - greenhouse Channel: A03 - A03, High Level Alarm, 48.930 higher than 48.500

Premier Client for iPhone



**Premier Client
for iPhone**
Easemind Technology...

Premier Client for Android Phone



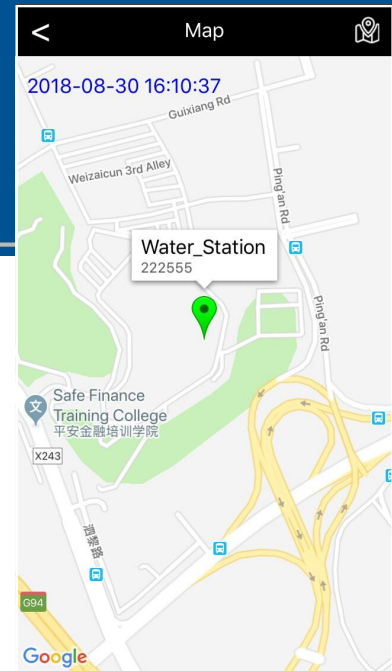
Premier Client
Easemind Technology Ltd.
E Everyone

Premier Client for iPhone & Android Phone allows user to use smartphone to access server data:

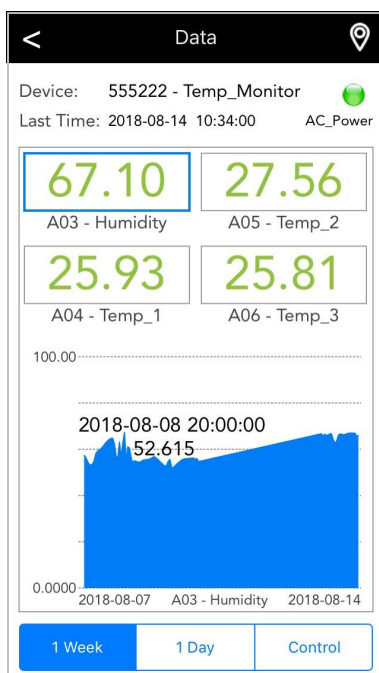
- More user friendly operation on touch screen, fast response and crystal clear display
- Instant manual data checking
- Channel name user definable
- Device and Channel user selectable

Features:

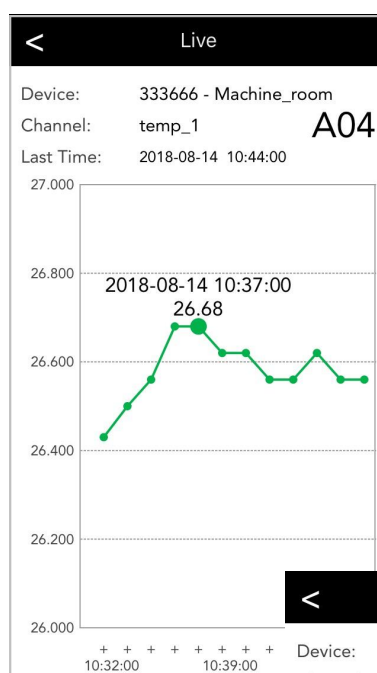
- Meter, Data Dashboard, Live Chart Line for live data, GPS Map
- Report Chart for history data



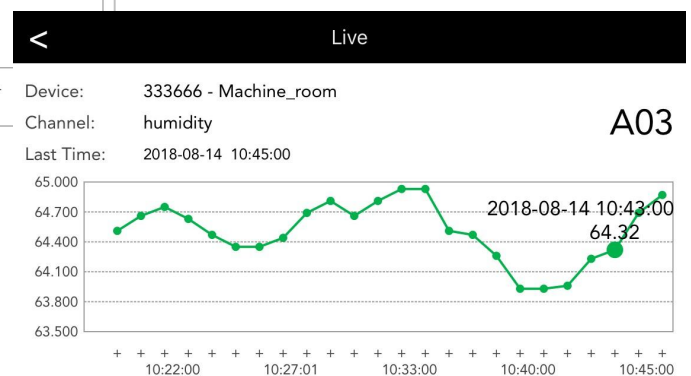
GPS Map



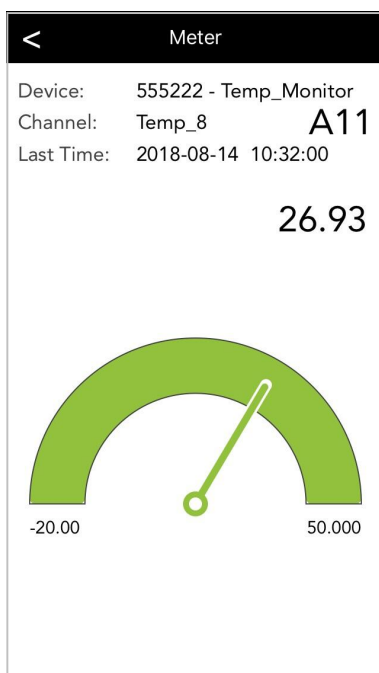
Dashboard



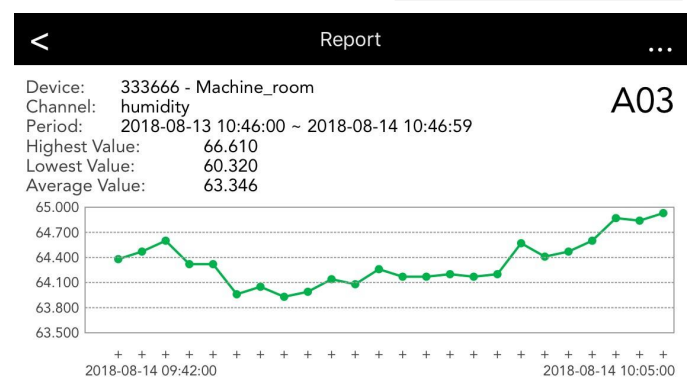
Line Chart



History Data Report



Meter



<Direct Mode>

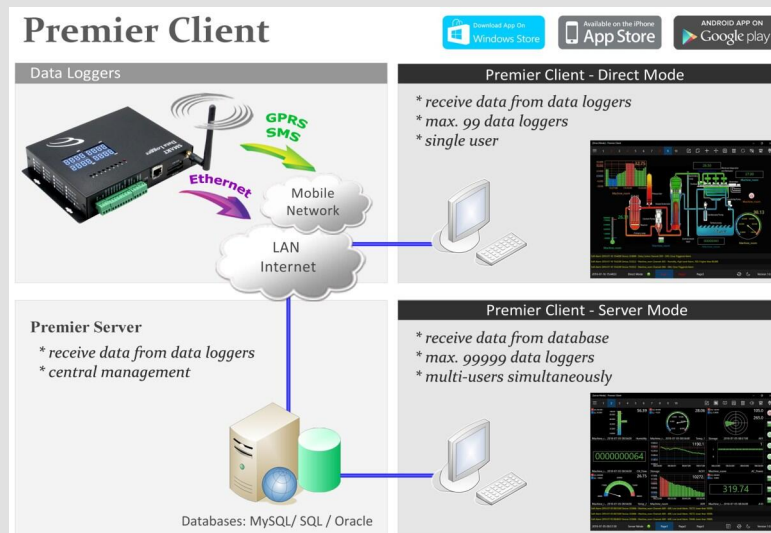
[few data loggers to one user] system

Data loggers send data to Premier Client:

- Only 1 Premier Client receives data

Premier Client [Direct Mode]

- Free Version - receives data from max. 2 data loggers
- Full License Version - receives data from max. 20 data loggers
- Alarm email delivered from Premier Client PC



<Server Mode>

[many data loggers to many users] system

Data loggers send data to Premier Server:

- Max. 999 Premier Client Users
- Direct access data from the Server Database

Premier Client [Server Mode]

- Receives data from max. 999999 of data loggers
- Access of both live and historical data from Server Database
- Alarm email and SMS can be delivered from Premier Server to many users
- Grouping allows assignment of data loggers to different client users
- Free bundled with Premier Server Software

Highlight

Each Client: 3 Pages

Each Page: 10 User Profiles

HMI Display: max. 100 channels

Split Screen: max. 9 channels (3x3)

Data Listing: unlimited channels

Line Chart: max. 8 channels

Dashboard: max. 64 channels one single screen

Map : GPS Data

Data & Alarm: Live, Historical & Report

Alert: Visual & Buzzer, Email & SMS

Key Points:

- Each user profile can be configured as:
HMI / Split Screen / Data Listing / Line Chart Display / Dashboard / Map
- Channel data of all user profiles will be refreshed in interval automatically
- User can switch among user profiles for instant data viewing
- Client accesses data either in direct mode or server mode
- Alarm on each profile and individual channel will be displayed
- Independent alarm setting for each client user
- Analog Channel, Digital Alarm and Pulse Channel are all supported
- Chart Styles, High/Low Alarm Color, Range are user programmable

Premier Web Server

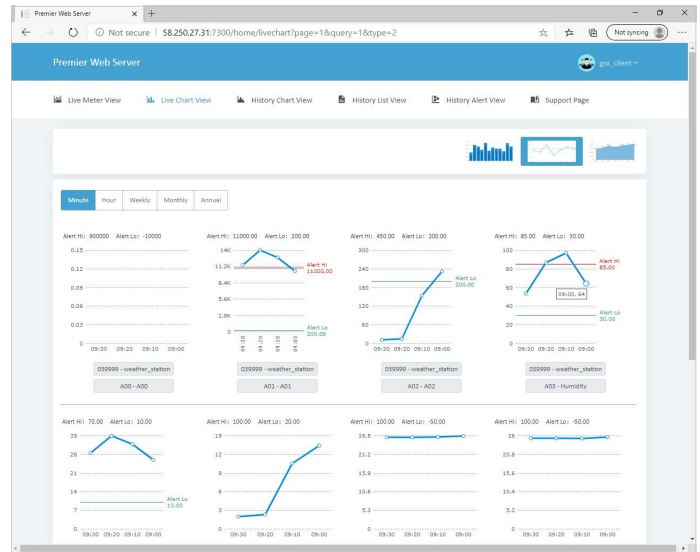
by Web Browser

Web Server (asp)

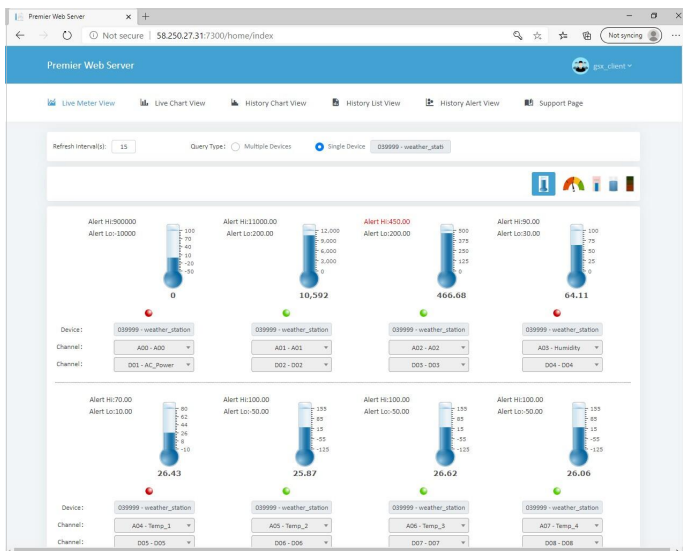
Data presentation is possible at any place using Web Browser

- Multiple Devices Multiple Channel Selection]
- Single Device Multiple Channel Selection
- 5 meter graphics user selectable
- Refresh Interval user selectable
- Max. 12 channels each page, max. 10 pages
- Analog, Pulse & Digital Alarm Channels are supported
- Data & Alarm display
- Each client can monitor max. 120 data loggers or channels in real time simultaneously
- Real time alarm alert

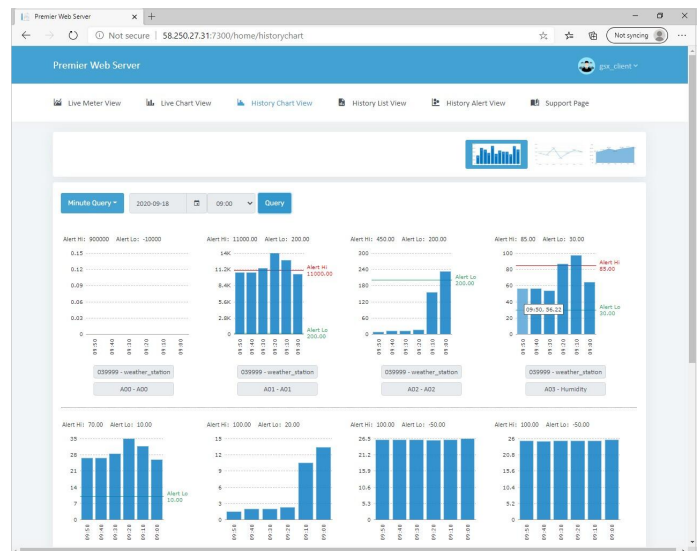
Live Chart



Live Meter



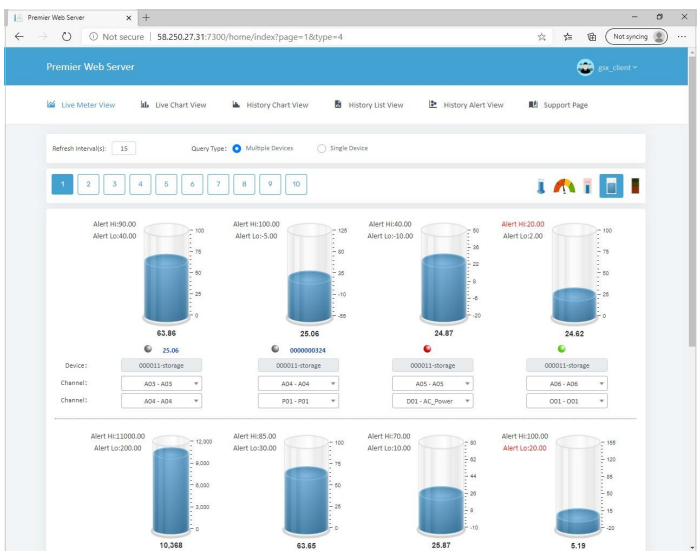
Comparison Chart



Data and Alarm Listing

Device	Channel	Channel	Channel	Channel	Start Time	End Time
039999	A03 - Humidity	P01 - P01	D01 - AC_Power	D01 - D01	2020-09-18	2020-09-18
Device ID	Device Name	Upload Time	A03	P01	D01	D01
1	039999	weather_station	2020-09-18 11:15:00	61.18	000021541	1
2	039999	weather_station	2020-09-18 11:10:00	60.81	000021541	1
3	039999	weather_station	2020-09-18 11:05:00	57.82	000021541	1
4	039999	weather_station	2020-09-18 11:00:00	55.47	000021541	1
5	039999	weather_station	2020-09-18 10:55:00	54.80	000021541	1
6	039999	weather_station	2020-09-18 10:50:00	54.83	000021541	1
7	039999	weather_station	2020-09-18 10:45:00	55.56	000021541	1
8	039999	weather_station	2020-09-18 10:40:59	55.47	000021541	1
9	039999	weather_station	2020-09-18 10:35:00	55.44	000021541	1
10	039999	weather_station	2020-09-18 10:30:00	55.33	000021541	1
11	039999	weather_station	2020-09-18 10:25:00	54.74	000021541	1
12	039999	weather_station	2020-09-18 10:20:59	54.62	000021541	1
13	039999	weather_station	2020-09-18 10:15:00	54.65	000021541	1
14	039999	weather_station	2020-09-18 10:10:00	54.38	000021541	1
15	039999	weather_station	2020-09-18 10:05:00	55.50	000021541	1
16	039999	weather_station	2020-09-18 10:00:01	55.61	000021541	1
17	039999	weather_station	2020-09-18 09:55:00	55.64	000021541	1

Meter or Chart Selection



Premier Server Edition



Edition	Centre	Premier GSX8
[A] Software		
Data Logger support	GSX8	GSX8, GS828
Receive Data & Alarm via GPRS	Yes	Yes
Receive Data & Alarm via SMS	—	Yes
Receive Data & Alarm via Ethernet, Wi-Fi	Yes	Yes
Live, Historical & Statistical Data Display	—	Yes
Database	txt	MySQL
		SQL / Oracle
Data Export to mdb or SQLite	—	Yes
Remote Command via Ethernet, SMS, Internet	—	Yes
Server & Data Logger Clock Auto-Synchronization	—	Yes
Analog, Digital, Pulse, Temperature & Humidity Alert	—	Yes
Send Alarm Alert via TCP network, email, SMS	—	Yes
Alarm Email & SMS Phone Grouping & Management	—	Yes
Remote Clients Grouping & Management	—	Yes
Premier Client Software support	—	Yes
Max. Data Loggers simultaneous support	99	99999
Data Loggers Grouping & Management	—	Yes
Intelligent Data Recovery	—	Yes
Redundant Database Management	—	Yes
Login User Authentication & Management	—	Yes
Network Client Authentication & Management	—	Yes
Data Direct Access for user development	—	Yes
Server Loading & Performance Status Monitoring	—	Yes
Tank Volume Formula built-in	—	Yes
Pulse Counter Flow Volume & Rate Calculation	—	Yes
[B] Premier Client Software for Win11	N.A.	Bundled
Direct & Server Mode	—	Yes
Number of client users simultaneous connection	—	999
Live, Historical & Alarm Data Display	—	Yes
AD Level, Temperature & Humidity - 2 levels of Hi/Low Alert	—	Yes
Graphics Display of Temperature, Humidity & AD	—	Yes
No. of User Profiles / No. of Channels each profile	—	30 / 9
Charts & Lines (Listing, Meter, Line Chart...)	—	12
Remote Setup	—	Yes
[C] Premier Client for iPad, iPhone & Android Phone	—	Yes
[D] GPS Map Display	—	Yes
[E] 4G Modem for receiving SMS data or sending SMS alarm	—	Optional

Premier Client

for Win11, iPad, iPhone, Android Phone

	Premier Client Lite	Premier Client
	Free bundled Direct Mode	Free bundled with Server Software Server Mode
Windows 11, iPad, iPhone, Android Phone	Yes	Yes
[A] Server Mode		
Receive Data & Alarm via GPRS, Ethernet, Wi-Fi	—	Yes
Receive Data & Alarm via SMS (4G Modem optional)	—	Yes
Receive Data & Alarm via SMS	—	Yes
Receive Data via GPRS & Ethernet simultaneously	—	Yes
Server Database	—	Yes
Data Export to Excel	—	Yes
Intelligent Data Recovery	—	Yes
Redundant Database Management	—	Yes
Remote Command via SMS, Ethernet	—	Yes
Schedule Live & History Data Export	—	Yes
Temperature & Humidity Software Alarm	—	Yes
Send Alarm Alert via IP network or email	—	Yes
Data Loggers Grouping & Management	—	Yes
Remote Clients Grouping & Management	—	Yes
Client Software support	—	Yes
Max. Data Loggers simultaneous support	—	99999
Max. Clients simultaneous support	—	999
Max. Channels	—	unlimited
[B] Direct Mode	Limited	—
Receive Data & Alarm via GPRS	Yes	—
Receive Data & Alarm via Ethernet, WiFi	Yes	—
Receive Data via GPRS & Ethernet simultaneously	—	—
Alarm Alert on screen and email	Yes	—
Schedule Live & History Data Export	Yes	—
Max. Data Loggers accessed simultaneously	2	—
Live, Historical & Alarm Data Display	Yes	—
Digital Alarm Alert each profile	2	—
AD Level, Temperature & Humidity Hi/Low Alert	Yes	—
Graphics Display of Temperature, Humidity & AD	Yes	—
[C] Screen Display (Win 11)		
No. of User Profiles	4	30
No. of Channels in Data Listing	unlimited	unlimited
No. of Split Screen profiles / Channels each profile	1 / 9	30 / 9
No. of Channels in Chart Line profile	2	8
No. of HMI profiles / Channel each profile	1 / 4	30 / 30