Smart G4 BMS Control Platform (GBMS)

2020

Rev.2

Explaining Smart G4 Control Platform (GBMS)

Smart G4 Control Platform is an Advanced BMS.

It Can DO what the normal BMS can do without the need for manned operation.

The GBMS has many advanced features:

- Global monitoring Ability (Multi-Location)

- Online Direct calculation and visualization

- Decision making and action taking based on its built in logic intelligence, schedule, events and triggers.

- Alert reporting then stepped automated problem solving

- Logical instant Energy calculation

- Logical easy Maintenance scheduling based on working hours and geographical location

- Voice guided with easy reporting and visualization

Native G4 GBMS Systems:

Smart G4 GBMS covers natively many systems in simple way

- HVAC (Valves, Chillers, Temperature, Fans, Humidifiers, Extractors, filters..etc)
- Boilers (Temperature, Tank level, leakage, Pressure release, etc.)
- Elevator Floor Access control
- Pumps control (Run, Trip, Auto, Manual, Leak ++)
- Pool, Sauna, Jacuzzi and wine cellar systems
- Lighting Control (Intelligent lighting, Façade, Indoor, Garden ++)
- Door Access Entry linked to occupancy for easy evacuation by fire marshals
- Clinic and SPA systems
- Exit Door Monitoring, Windows and Patios ++
- Zoned BGM and Multi-Zone Audio with Emergency evacuation and override
- Multimedia System and controls release for banquet and event halls
- Ask for Other systems controllers please.
- Motorized shades control based on sun and daylight harvesting

Field Devices

Smart G4 GBMS Hardware accepts many field sensors and detectors in ease

- Pressure and Deferential Pressure
- Temperature (indoor, outdoor, Water, Liquids, ++)
- CO gas level
- Air Quality
- Gas Leak , Smoke Detectors, UV sensors,
- PIR, microwave, presence and occupancy sensors
- Humidity (indoor and outdoor)
- Water Leak
- Liquids Tank Level
- Energy Metering (per system, per department ++)
- Lux Light intensity (indoor and outdoor)
- Water Meter collecting and logging
- Third party Alerts Like Fire, Burglary, Emergency evacuation triggers, Escalator/Elevator emergency, Spa emergency, Cold store emergency ++
- Ask for your Sensor/Detector Needs and integration abilities.

Smart G4 I/O and sensors

Other than third party sensors and devices, Smart G4 has its own Sensors and detectors.

- The Amazing Mini I/O Provides analogue integration readings using: 4-20mA, 2-60mA, 0-5V, 0-10V, 0-60 Volts Calibratable
- The Smart ESR and Gladiator I/O that has up to 57 Ports
- PIR Sensors
- LUX light intensity Sensor
- People Counter
- Real occupancy Octopus Seat/Bed Sensor
- Microwave sensor
- Ultrasonic Sensors
- Heart Beat sensors
- Low Energy Bluetooth Sensors
- Bio face recognition sensors for special applications like PWD
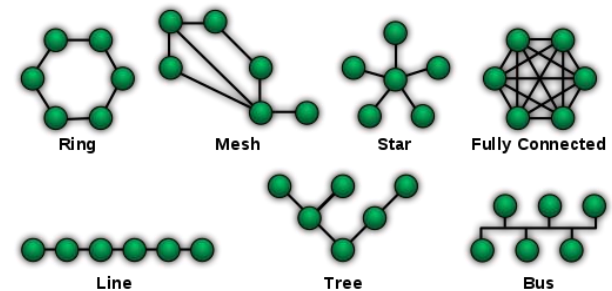- Current sensors (for metering and for Reporting Location and Qty of Burned Light Bulbs)

System capacity and wiring

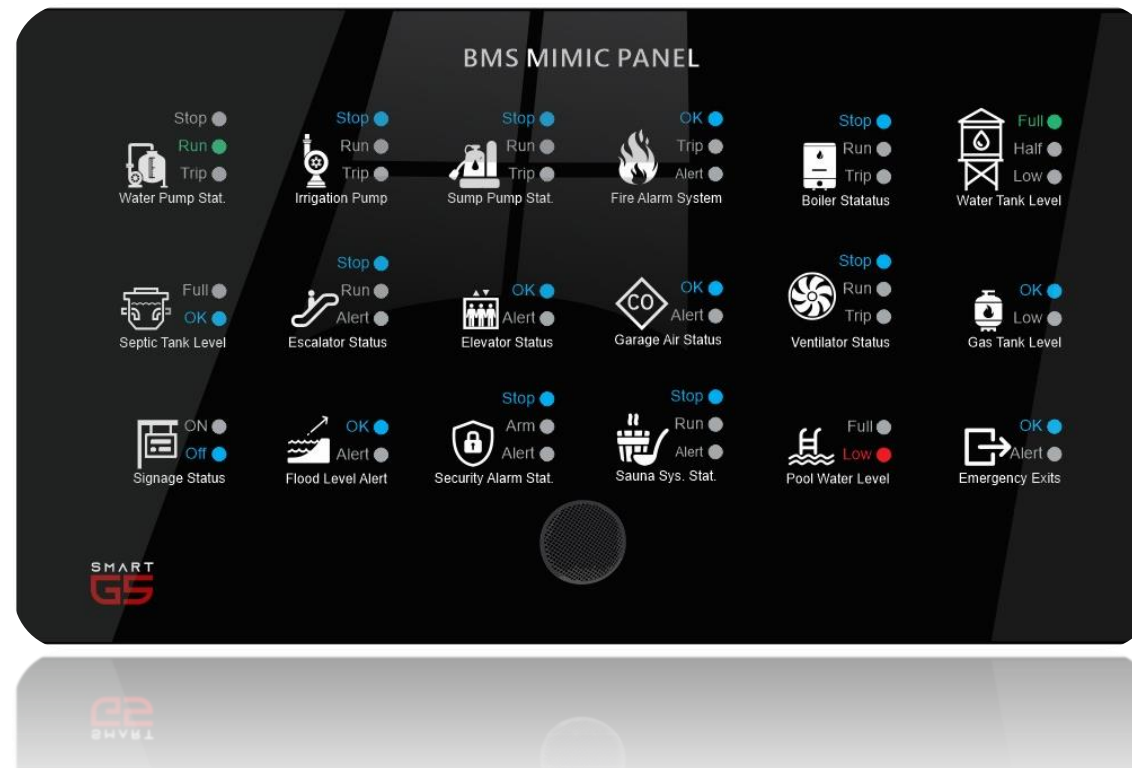Smart G4 can have up to 15.5 Million Devices connected for a Single Building

- Can Have Maximum of 430 Million Digital Addressable Ports/Folds
- Can Have Maximum of 150 Million Mixed control Channels and Sensors
- Can Have Maximum of 890 Million Mixed I/O controls and inputs
- Can Have Maximum of 90 Million Analogue Addressable I/O Ports

GBMS uses S-BUS remarkable technology that accepts multiple Wiring Topologies simultaneously, making it easy to wire, connect on the go. The S-BUS communication distance can reach 2.3KM on STP S-bus cable with the flexible ability to add Power supply on the go.

Smart Platform vs BMS

With today's technology. There is no more need for BMS engineer to sit and monitor continuously behind the BMS screen. Our Smart G4 GBMS system is smart. It allows everyone to be part of that monitoring via app. Cloud or by our simple display which can be located at building entry

- Our Simple Mimic panel with its flexible system and Icons, can report status and deliver visual and audible alerts. Once status change it updates Automatically and logically, or can be muted by SW or by push button

Protection and Voltage

S-BUS G4 are built to last a lifetime with perfect operability. Accordingly it was designed with the following built in Protection:

- Overheat Protection

- Overload protection

- Reverse Polarity Protection

- Short Circuit Protection

- Also It has Operation ELV voltage range ability between 9VDC-48VDC

- It has Isolated Ports So it can control mix LC-ELV, Low voltage and other loads simultaneously with same device

- Example: Can connect all these at same time: Volt free Dry Contact, 5V, 12V, 24V, 36V, 48V, 60V, and 80VAC-250VAC single and 3 phase.

Open Protocol and Assistance

Smart-BUS G4 Protocol is an Open Protocol for Developers and integrators We provide its low level Deep commands to signed partners under Secure NDA.

We Provide the following SDK:

Simulators

DLL

Protocol Documents

Examples

Source codes

In-House Training and assistance

And Available to Purchase Kits

Support, QC and Warrantee

Smart G4 University has online forums and Groups to fully support 24/7 globally

We do three Types of Preparation and backup for our partners:

- Training workshops and Certification for designers and installers
- On-line training and videos and webinars
- On-Site QC inspection

- We also Support remotely using Team viewer
- Telegram, what's app and wechat

All Smart G4 Lighting Controllers go under 10 levels of Quality inspection during the manufacturing process.

All our products come with factory warrantee of 24 Months, extendable locally by local installer/integrator.

We also assure availability of spare parts for 10 years after phasing out any product model

Contact our Partners

For best service, kindly contact our Smart-G4 official partner nearest to you

www.smartg4.com