

SMARTHOME **BUS**

THE BEST CHOICE FOR HOME AUTOMATION

CONTENTS

- Introduction to SmartGroup
- What is S-bus?
- Smarthome solutions
- Lighting control
- HVAC control
- Control Panels
- IR remote control
- Sensors
- Smart Apps for Home & Hotels
- Integration to 3rd party systems

INTRODUCTION TO SMARTGROUP

3

- Established in USA since 1986
- SmartGroup is a group of following entities:
 - Smart Labs: Involved in research and development of hardware and firmware
 - Smart Soft: Providing Software support
 - Smart Industry: Involved in Manufacturing of Smart-Labs products
 - Smart Solutions: Involved in creating Smart Industry products and partnering with manufactures to provide complete solution packages

INTRODUCTION TO SMARTGROUP

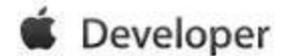
4

- Where is SmartGroup found?
 - ▣ USA for concept
 - ▣ Denmark for Design
 - ▣ Germany for Engineered parts
 - ▣ Dubai for Lifestyle Functionality
 - ▣ China for Parts assembly and Mechanical Tooling Technology

INTRODUCTION TO SMARTGROUP

5

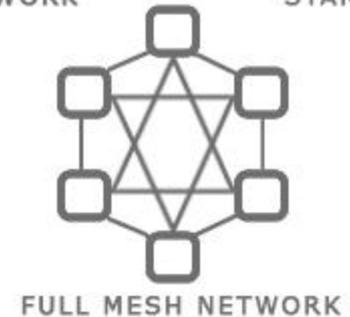
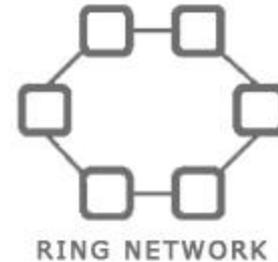
- SmartGroup is a member of the following organisations:



WHAT IS S-BUS?

6

- Smart-Bus or simply S-Bus uses 4-Pair twisted pair data cable to control, monitor and command devices simultaneously.
- Up to 250 devices can be connected on one cable with a maximum length of 1200m
- Devices can be connected in the following topologies:
- Voltage Range: 8-32V
- Device consumption: 20-32mA



S-BUS EVOLUTION

7

G1 Experimental & Ideas www.sbuspro.com



USA
UAE

G2 S-Bus Is Born www.sbuspro.com



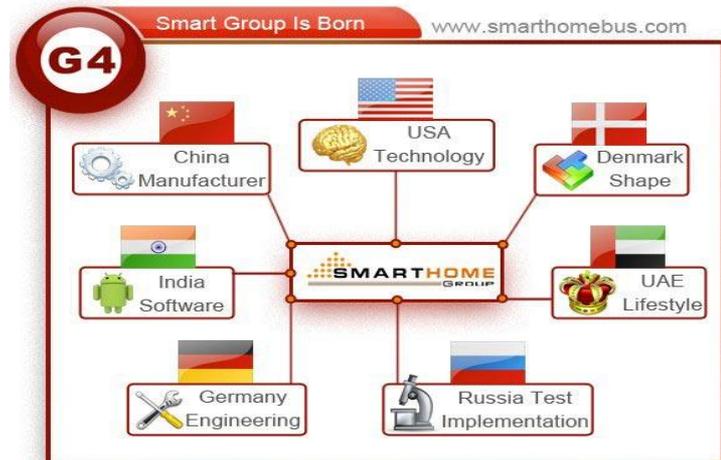
Contract Manufacturing + Pilot Projects Implementation

S-Bus HDL

G3 Smart-HDL Is Born www.smart-hdl.com



50% Smart-HDL 50% HDL Hedong Lighting



SMART-BUS Generation 4 (G4)

8

G4 as Compared to the old Smart-BUS:

- ❑ Easier and More Flexible Installation
- ❑ Elegant Finishes and Materials
- ❑ Easy Backup and Restore for All Devices
- ❑ 25 Language Configuration Support
- ❑ Each Device has Multi Features and multi-Usage
- ❑ (Less Equipment)
- ❑ More Compact Devices and Wider range of ideas
- ❑ Faster response, Bigger Device Memory

SMART-BUS Generation 4 (G4)

9

G4 Compared to any other Systems:

- ❑ One Complete Solution from one Manufacturer and a single control Protocol
- ❑ Most Flexible Wiring system and Materials available today
- ❑ Unmatchable Number of Devices that can be installed in a single Network
- ❑ Simplest Manual Programming Ever made available to a Luxury System (7 Seconds without PC)
- ❑ Real Open Protocol, and Easy Seamless Integration

SMART-BUS Generation 4 (G4)

10

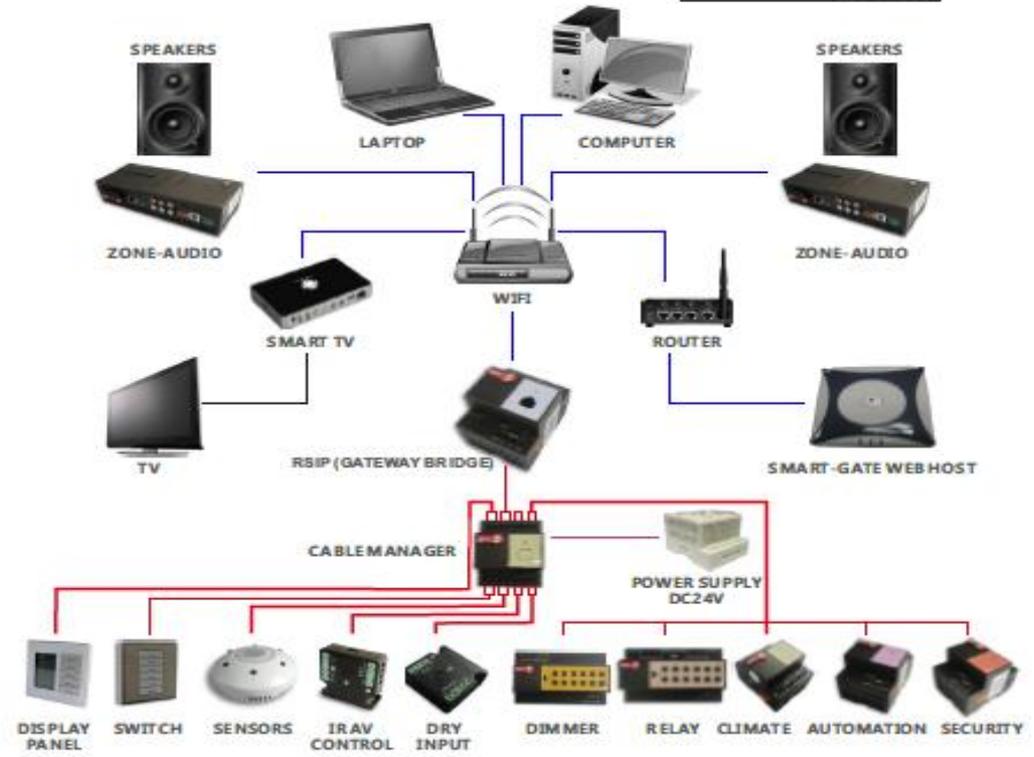
Reasons to choose G4:

- ❑ Available, Stable & Widely tested
- ❑ Affordable
- ❑ Elegant to extreme Luxury
- ❑ User friendly
- ❑ Expandable
- ❑ Easy Wiring
- ❑ Fast Programming and configuration
- ❑ Continuous Research & Development
- ❑ Excellent Support
- ❑ Expanding Global Network

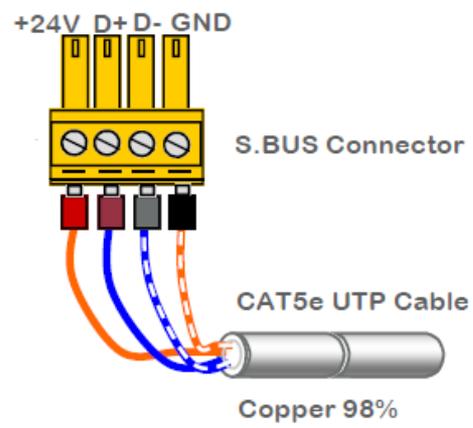
SMARTHOME SOLUTIONS

General System Diagram

CABLES	
	LAN
	S-BUS
	A/V
	DC24V



S-BUS connection



SMARTBUS SOLUTIONS

12



Smart Hotel GRMS



Architectural Intelligent Lighting



Smart Yacht Solution



Smart Home



Smart Prayer Hall



Smart School



Smart Hospital / Smart Clinic



Intelligent Building



Smart Club



Smart Restaurant



Smart Mall



Musical Fountains and Show Control



Smart Spa / Smart Resort / Smart Beauty Salon

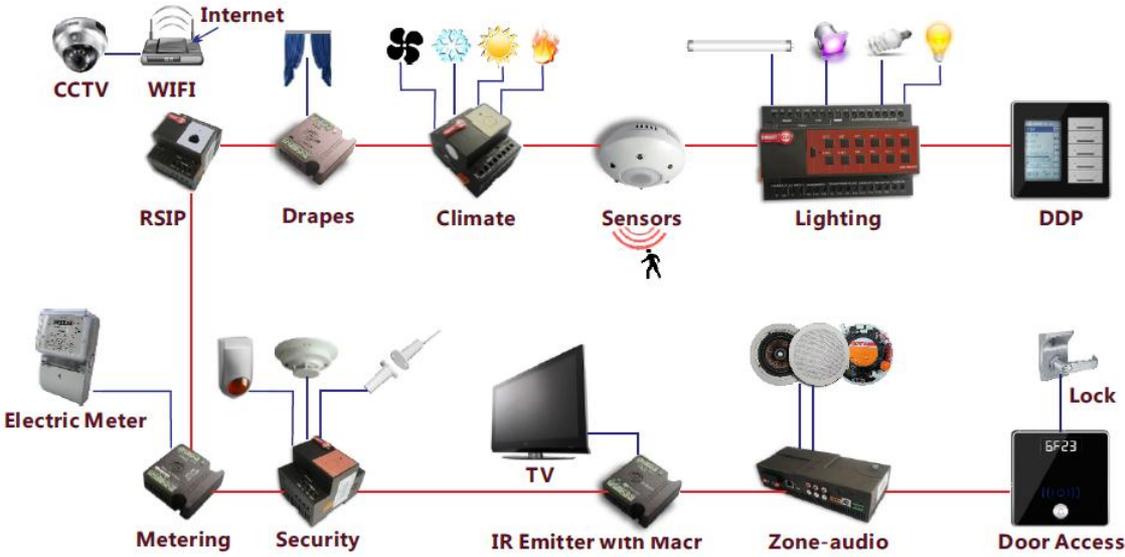
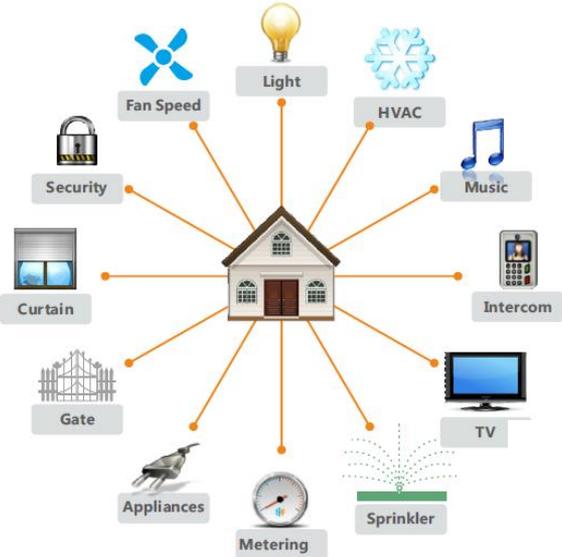


Smart Congress Halls, Towers, and Banks



HOME AUTOMATION USING SMARTBUS

13



SMARTBUS LIGHTING CONTROL

14

□ Type of Dimmable loads:

- Incandescent
- CFL
- Halogen
- Dimmable LED

(Note: Light must be dimmable by Manual Dimmer)

- Fluorescent
- Neon tube
- Metal Halide

(Note: Ballast must be dimmable, controllable and addressable type)

- Dimmer modules exists in 1, 2, 4, 6 and 8 channels
- Each channel can be rated 1A, 2A, 4A, 6A up to 10A, depending on models



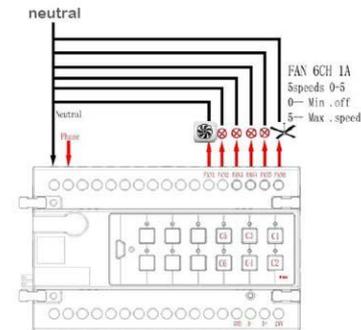
SMARTBUS HVAC CONTROL

15

- Fan Speed Controller – can handle up to 5 speeds
- HVAC Climate Control module used with Fan Coil Unit, Air Handling Unit and VAV systems



electrical diagram 



HVAC Trail Click



Fan Speed Module



4T Input-Module



Temperature Sensor Probe



IR Emitter with Macro



1Dimmer 1Relay 1Fan TC



IR Emitter w/ Current Sensor



Micro Climate Sensor

SMARTBUS CONTROL PANELS

16

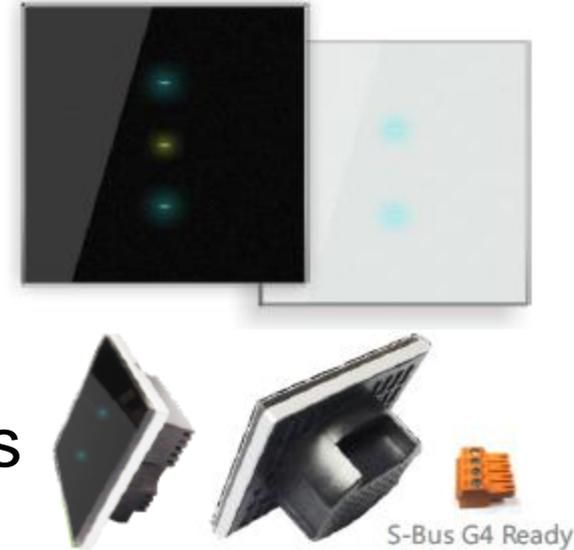
- Dynamic Display Panel (DDP) is an intelligent switch that can be used to control:
 - ▣ Lighting and Mood setting
 - ▣ HVAC
 - ▣ Blind control
 - ▣ Security & Alarm system
 - ▣ Music



SMARTBUS CONTROL PANELS

17

- Touch-Switch
 - ▣ Using Touch-type button to
 - ▣ Control lights
 - ▣ Elegant design with glass face
 - ▣ Retrofit solution for homes and hotels



Other switches with different fascia available:



IR REMOTE CONTROL

18

- One remote control for several purposes:
 - ▣ Lighting
 - ▣ Curtain control
 - ▣ HVAC
 - ▣ Music
 - ▣ Security

Security and top Area



Music and central Area



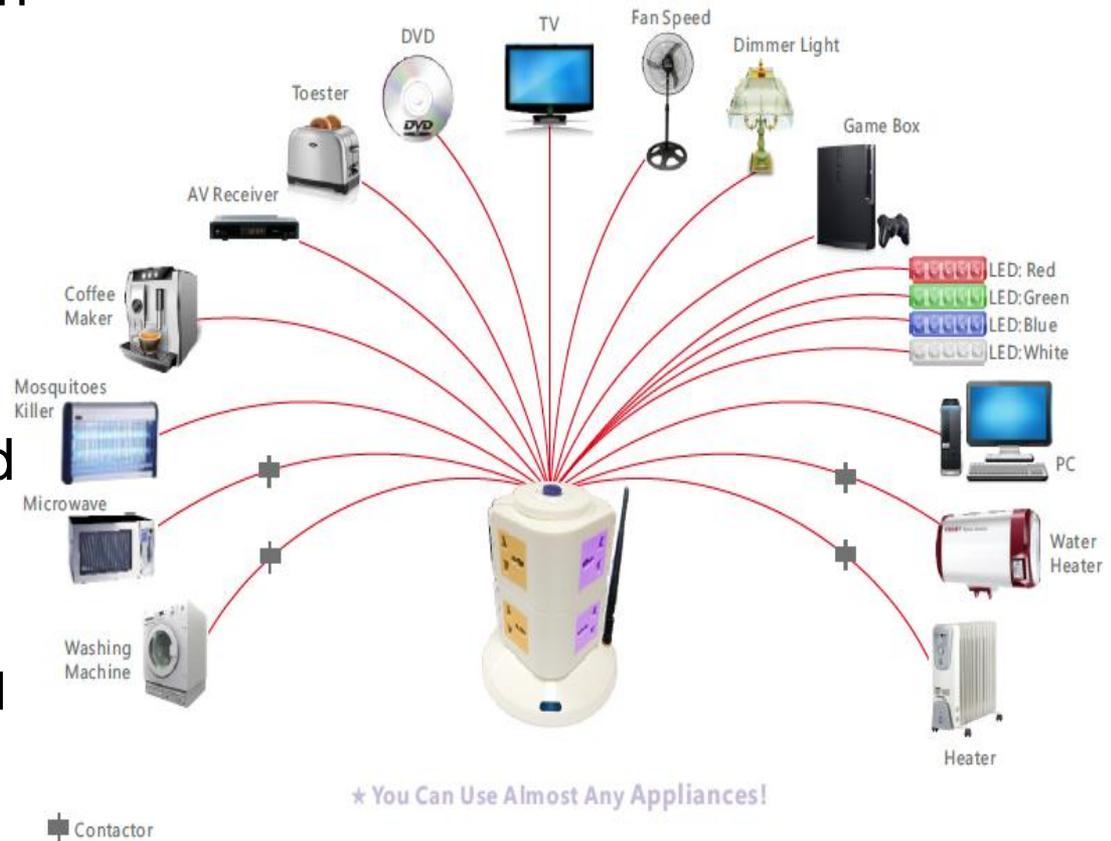
HVAC and Lower Area



SMART POWER STRIP

19

- Universal sockets that can be used to control many appliances
- 6 Sockets rated 5A each
- 2 Lighting (Dimmable) sockets rated 1A each
- Sockets can be controlled using
 - ▣ S-Bus network
 - ▣ WIFI-enabled tablets and smartphones
 - ▣ Handheld IR Remote control



SENSORS

20

- In addition to standard PIR sensor, SmartHome provides All-in-One sensors, E.g. 9 in 1 Multifunction sensor that has following:
 - ▣ Motion sensor
 - ▣ Light intensity sensor
 - ▣ Infrared receiver for IR remote control,
 - ▣ 360 degrees IR transmitter to control equipment like TV, DVD, etc....,
 - ▣ 2 Dry input contacts for Safety & Security systems
 - ▣ Built-in Temperature sensor
 - ▣ 32 logic lines for programming purposes



EXAMPLE FOR SENSOR APPLICATIONS

21



SMARTHOTEL SOLUTIONS

23

- Touchpanel for Smart Hotel guest system that can be for the following applications:
 - ▣ Lighting control
 - ▣ Scene control
 - ▣ Curtain control
 - ▣ Temperature control
- Door Bell Panel & Hotel Card Holder



SMART APPS

24

- System can be also controlled by smartphone (Apple/Android)
- Screenshot of Smart Home App



SMART APPS

25

□ Screen shot of Smart Hotel App

Main Menu



AC



Cameras



House Keeping



Smart TV



Room Service



3RD PARTY INTEGRATION

26

- SmartBus allows for other industry protocol used by other manufacturers to be integrated to S-Bus system, namely:
 - ▣ RS-232
 - ▣ RS-485
 - ▣ KNX
 - ▣ DALI
 - ▣ DMX
 - ▣ ZIGBEE

