

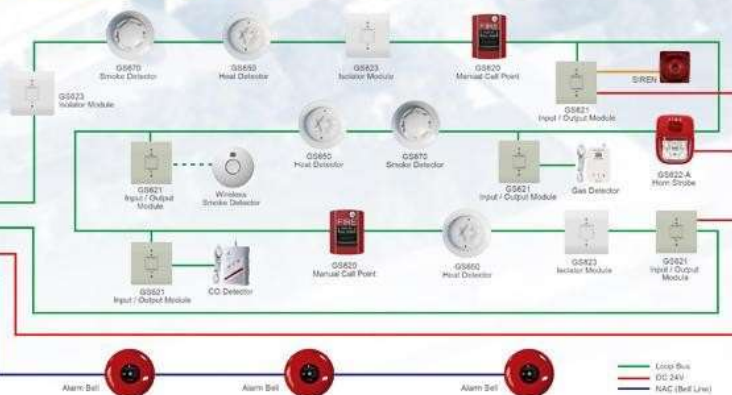


# SITERWELL



## Analog Addressable Fire Alarm System UL 864 10th Edition & NFPA72

**Network Up  
To 64 Panels**



# Analog addressable fire alarm system GS690

## UL 864 approval

### Solution for small and medium-sized buildings



### 3D monitor system integration available !

- 32 bit processor Arm Cortex M3
- High/Low voltage separately protection circuit for safety
- Pluggable Loop PCB board available
- Networking up to 64 panels
- AC type detector integration available by I/O module GS621
- Loop Options: 1 loop; 1 loop expanded to 2-loops; 2-loops
- High contrast backlit LCD provides 4 rows of 40 characters for device and system status
- 4 Access Levels & 4000 events history log
- Day/night mode configurable
- Up to 127 addressable devices per loop & 40 configurable zones
- Automatic device type-code verification



Commercial Mall



Office Building



Hospital



Hotel



School



Residential Area



GS690

Optional Power supply  
Max.Support 32 horn strobes  
in one loop

### Analog Fire Alarm Control Panel

- Power: Input: AC(100 ~ 240)V/ 50/60Hz
- Emergency power supply: 12Ah @ 24V (2 x DC 12V)
- Battery fault voltage:  $\leq$  DC 20V
- Standby current: 100mA @ DC 20 ~ 28V
- Loop current: 200mA
- Relay output: 3 x (1.0 A @ DC 30V /1A @AC 240V)
- Humidity range: 0%- 95%
- Temperature range: 0 °C ~ +49 °C
- Support Ethernet, RS485 interface, USB, PC software
- Transmission distance up to 3KM, stable and reliable

FIRE ALARM CONTROL PANEL SPECIFICATIONS



Product parameter

Product Name	Addressable Fire Alarm Control Panel	Product number	GS690
Certificate	UL	Standard	UL864
Power Supply			
Operating voltage	AC(110 ~ 220)V,50/60Hz	Mains supply Current Limit	2.1A
Mains supply fuse	4A/AC 250V slow blow(20mm)	Power supply	3.5A@28.5V
Standby battery maximum capacity (2xDC 12V)	12Ah	Maximum battery current draw	1.2A@maximum operating temperature
Charging Circuit	28V,±2% Nominal	Battery fuse	1A resettable(electronic fuse)
Battery fault threshold voltage	< DC 20V	Quiescent current	100mA @ DC28.5V
Addressable Loops			
Addressable loops	2	Number of connected devices per loop	127
Loop current(max)	100mA @40ohms(max) @24V DC per loop	Loop monitoring	Open, short-circuit and Ground
Power Limited			
Audio Alarms			
Configurable audio alarm groups(max)	7	Non-addressable audio alarm device driver	220mA (Line Drop: 2.4V) (Total)
Non-addressable audio alarm end-of-line resistor	10KΩ	Alarm zone monitoring	Open , Ground, and short-circuit
Power Limited			
Alarm zone voltage(max)	DC 24V	Current Rating for Regulated,mA	22
Current Rating for Special Applications,mA	220	Alarm zone fuse	1A resettable(electronic fuse)
24-Aux Output (Use to power Strobes/Horns Only)			

Power Limited			
Alarm zone voltage(max)	DC 24V	Current Rating for Regulated,mA	22
Current Rating for Special Applications,mA	220	Alarm zone fuse	1A resettable(electronic fuse)
24-Aux Output (Use to power Strobes/Horns Only)			
Nominal output voltage, Vdc	24	Recorded Voltage range for compatibility, V	17.2-27.7
Maximum circuit output current,A	1.35	Current Rating for Regulated, A	0.135 (max 1 NAC device)
Current Rating for Special Applications,A	1.35 (max 10 NAC devices)	Max line Impedance (ohms)	2 (per loop)
Ancillary Outputs			
Number of programmable output relays	3(Power factor 1)	Ancillary fire C/O relay	2x(1.0A@DC30V)
Ancillary Inputs			
Evacuation start/stop	Non-latching, voltage-free		
Miscellaneous			
Terminal Wiring	28 -14AWG (0.5 ~ +1.6)mm2	Operating temperature	(0 ~ +49)°C
Operating humidity	(0 ~ 93)%RH, Non-condensing	Storage temperature	(-25 ~ +80)°C
Storage humidity	(0 ~ 98)%RH, Non-condensing	Dimensions(LxWxH)	440mm*354mm*140.5mm
Weight (excluding batteries)	≤9.0kg	Ground Fault Impedance value	0 ohm



GS650

### Addressable Heat Detector

- Operating Voltage Range: 16~33VDC
- Standby current: < 200uA@24VDC
- Action current: < 6mA
- Sensitivity: 57.2°C-78.9°C (3 levels: 60°C / 62°C / 65°C)
- Two fire LEDs allows 360° viewing
- Standard: UL521:1999
- Humidity range: < 93%
- Working Temperature range: 0 °C-49 °C
- Two fire LEDs allows 360° viewing
- Size: Φ150\*59mm
- Conventional Heat detector is available for option.



GS670

### Addressable Smoke Detector

- Operating Voltage Range: 16~33VDC
- Standby current: < 200uA@24VDC
- Action current: < 6mA
- Sensitivity: 89uA- 94uA
- 3 levels Smoke Sensor Sensitivity (NORMAL/LOW/HIGH)
- Two fire LEDs allows 360° viewing
- Standard: UL268:2009
- Humidity range: < 93%
- Temperature range: 0 °C-49 °C
- Size: Φ150\*67mm
- Conventional Smoke detector is available for option.



GS620

### Addressable Manual Pull Station

- Operating Voltage Range: 16~33VDC
- Standby current: < 200uA @24VDC
- Temperature range: 0 °C ~ +49 °C
- Humidity range: 0%-93%(RH)
- Standard: UL38
- Size: 138\*104\*55mm
- Addressable type



GS621

### Addressable Input/Output Module

- Operating Voltage Range: 16~33VDC
- Loop current: 200mA
- Relay output: 2A, 30VDC; 0.5A 125VAC
- Temperature range: 0°C ~ +49°C
- Humidity range: 0% - 93%(RH)
- Size: 124\*124\*63mm
- AC type detector integration available by I/O module GS621
- Optional input/output



GS623

### Isolator Module

- Operating Voltage Range: 16~33VDC
- Standby current:  $\leq 0.6\text{mA}$
- Work current:  $< 30\text{mA}$
- Relay output: 1A, 30VDA; 1A 240VAC
- Temperature range:  $0^{\circ}\text{C} \sim +49^{\circ}\text{C}$
- Humidity range: 0%-93%(RH)
- Size: 124\*124\*63mm



GS620-P01/02/03/04

### Isolator Module

#### UL 94V-2: UL( US/ C) 38: UL( US/ C) 464

- Power Type: DC 9 V battery
- Alarm Volume:  $>95\text{dB}@03\text{m}/1\text{ft}$
- Alarm Type: audio & visual
- Indicator: red LED
- Temperature Range :  $-40\text{--}49^{\circ}\text{C}/-40\text{--}120^{\circ}\text{F}$
- Humidity Range: 15-93% RH(non-condensing)  $< 93\%$  RH(non-condensing)
- Installation Method: mounting bracket
- Operating Life : 10 years



GS622-A

### Addressable Horn Strobe

- Operating Voltage Range: 16~33VDC
- Light intensity: 15cd, 30cd, 75cd, 110cd, user selectable
- Sound mode: Intermittent sound, Continuous sound, Optional
- Temperature range:  $0^{\circ}\text{C} \sim +49^{\circ}\text{C}$
- Humidity range: 0% - 93% (RH)
- Size: 140\*120\*50mm
- Low Frequency 520HZ-Waking Effectiveness
- Synchronization
- Ceiling mount pending
- Self-test function



GS626

### Alarm Bell

- Operating Voltage Range: 16~33VDC
- Standby current: 0 A
- Alarm Current: 25 mA
- Alarm volume:  $\geq 95\text{ dB @ }1\text{ m}$
- Terminal line: (0.4 ~ 2.5) mm<sup>2</sup>
- Temperature range:  $0^{\circ}\text{C} \sim +65^{\circ}\text{C}$
- Humidity range: 0%-93% (RH)
- Storage temperature:  $-25^{\circ}\text{C} \sim +80^{\circ}\text{C}$
- Storage humidity: 0%-98% (RH)
- Size:  $\Phi 152*60\text{mm}$



# CERTIFICATE OF COMPLIANCE

**Certificate Number** 20181203-S36001  
**Report Reference** S36001-20181128  
**Issue Date** 2018-DECEMBER-03

**Issued to:** Siterwell Electronics Co., Limited  
No.666 Qingfeng Road Jiangbei District  
Ningbo, Zhejiang 315034 CHINA

**This certificate confirms that  
representative samples of**

CONTROL UNITS, SYSTEM; CONTROL UNIT  
ACCESSORIES, SYSTEM

Fire Alarm Equipment: Fire Alarm Control Panel, Model  
GS690.

Fire Alarm Subassembly: Enclosure, Model GS690-P01,  
Main Board, Model ST690-V1.1, Loop Board, Model ST690-  
LOOP-V1.0.

Fire Alarm Equipment: Input/Output Module, Model GS621;  
Isolator Module, Model GS623.

Have been investigated by UL in accordance with the  
Standard(s) indicated on this Certificate.

**Standard(s) for Safety:** UL864, Control Units and Accessories for Fire Alarm  
Systems.

**Additional Information:** See the UL Online Certifications Directory at  
<https://iq.ulprospector.com> for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and  
covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program

UL LLC

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# CERTIFICATE OF COMPLIANCE

**Certificate Number** 20190405-S25300  
**Report Reference** S25300-20190329  
**Issue Date** 2019-APRIL-05

**Issued to:** Siterwell Electronics Co., Limited  
No.666 Qingfeng Road Jiangbei District  
Ningbo  
Zhejiang 315034 CHINA

**This certificate confirms that  
representative samples of**

SMOKE DETECTORS FOR FIRE ALARM SYSTEMS  
Smoke Detector for Open Area Application:  
Model GS670, sensitivity selectable (NORMAL/64, LOW/76,  
or HIGH/51), fire automatic smoke detector.

Have been investigated by UL and ULC in accordance with  
the Standard(s) indicated on this Certificate.

**Standard(s) for Safety:** UL 268 for Safety for Smoke Detectors for Fire Alarm  
Systems and CAN/ULC S529 Standard for Smoke  
Detectors for Fire Alarm Systems

**Additional Information:** See the UL Online Certifications Directory at  
<https://iq.ulprospector.com> for additional information.

*This Certificate of Compliance does not provide authorization to apply the UL Mark and/or the ULC Mark. Only the  
UL Follow-Up Services Procedure provides authorization to apply the UL Mark and/or the ULC Mark.*

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ULC Certified, and covered under UL's Follow-Up Services.

Look for the UL Certification Mark and/or ULC Certification Mark on the product.



Bruce Mahrenholz, Director Conformity Assessment Programs (CPO)

UL LLC



Gursimr Paintal, ULC Mark Certification Program Manager

Underwriters Laboratories of Canada Inc.



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# CERTIFICATE OF COMPLIANCE

Certificate Number 20181101-S36057  
Report Reference S36057-20181028  
Issue Date 2018-NOVEMBER-01

Issued to: Siterwell Electronics Co., Limited  
No.666 Qingfeng Road Jiangbei District  
Ningbo  
Zhejiang 315034 CHINA

This certificate confirms that  
representative samples of

HEAT-AUTOMATIC FIRE DETECTORS  
Fire Alarm and Emergency Signaling Subassembly:

USL – Model GS650, temperature selectable (60°C/140°F;  
62°C/143.6°F; 65°C/149°F), hard wired heat detector.

CNL – Model GS650, temperature selectable (60°C/140°F;  
62°C/143.6°F; 65°C/149°F), hard wired heat detector.

Have been investigated by UL in accordance with the  
Standard(s) indicated on this Certificate.

Standard(s) for Safety:

UL 521, Heat Detectors for Fire Protective Signaling  
Systems  
ULC CAN-S530, Heat Actuated Fire Detectors for Fire  
Alarm Systems

Additional Information:

See the UL Online Certifications Directory at  
<https://iq.ulprospector.com> for additional information.

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# CERTIFICATE OF COMPLIANCE

**Certificate Number** 20180927-S25382  
**Report Reference** S25382-20180926  
**Issue Date** 2018-SEPTEMBER-27

**Issued to:** Siterwell Electronics Co., Limited  
No.666 Qingfeng Road Jiangbei District  
Ningbo  
Zhejiang 315034 CHINA

**This is to certify that  
representative samples of**

BOXES, NONCODED  
Fire Alarm Equipment:  
Boxes, Non-Coded, Addressable Manual Call Points, Model  
GS620 for indoor use.

Have been investigated by UL in accordance with the  
Standard(s) indicated on this Certificate.

**Standard(s) for Safety:** UL 38 Standards for Safety for Manual Signaling Boxes for  
Fire Alarm Systems

**Additional Information:** See the UL Online Certifications Directory at  
[www.ul.com/database](http://www.ul.com/database) for additional information

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## UL CERTIFICATION OF SOUDER/FLASHER

## Signaling Appliances and Equipment for the Hearing Impaired

## COMPANY

## Siterwell Electronics Co., Limited

No 666 Qingfeng Road

Jiangbei District

Ningbo Zhejiang 315034

NINGBO, Zhejiang Sheng 315034 China

S36159

**Addressable strobe light and horns, wall mounted** Model(s) GS622-A (Candela 15,30,75,110, Pulse width 20ms) (Regulated 24VDC/FWR) input 16.0-33.0 VDC/FWR (Regulated 24VDC/FWR).

**LED strobe light and horns, wall mounted** Model(s) GS622-B (Candela 15,30,75,110, Pulse width 20ms) (Regulated 24VDC/FWR) input 16.0-33.0 VDC/FWR (Regulated 24VDC/FWR).

**Visual signal devices, LED strobe light, wall mounted** Model(s) GS622-C (candela 15, 30, 75 or 110, Pulse width 20ms)

Note - All models are input: 16.0-33.0 VDC/FWR (regulated 24VDC/FWR)

Trademark and/or Tradename:



Last Updated on 2023-08-04

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Feedback

# COMPANY INTRODUCTION

**SITERWELL ELECTRONICS CO.,LIMITED** which was established in 2010, locate in Jiangbei District of Ningbo City, covering an area of 56,000 square meters. The company combine research, design, production and sales and was awarded as “High-tech Enterprises”, “Ningbo High-growth Enterprises”, “Technological Innovation Enterprise” and “Civic Top 100 Enterprises”.

Siterwell focus on creating various types of alarms, IOT industry application security solutions and smart home solutions. It's an enterprise which has firstly obtained the products' certifications of European standards, American and Australian standards in China, and also one of the most influential enterprises in Chinese alarm security fields.

Siterwell products are exported to around 66 countries, its products mainly include: various types of alarms (e.g.: smoke alarms, carbon monoxide alarms, gas alarms, heat alarms, water/water level alarms); thermostat; IOT intelligent security; smart home networking products and so on.

Our company is actively to promote the International development strategy and establish a close working relationship with many international brands and national standards laboratory. Our company established European branch to increase the international market developing ability, and fulfill international standard integrated in the brand, marketing, team, technology and management.

Siterwell staffs adhere to company spirit “customer first, honesty, candid and pragmatic and dedication” , and keep implementing the business philosophy “profession casts quality and innovation accelerates development”. Since establishment, we have achieved leap development and won the honor of “High-tech Enterprise”, “Technology Innovation Award”, “Security Industry Association Member Enterprise” and so on. Based on ISO9001: 2015 quality management system, we re-run the BSCI Human rights certification system and GB/T 29490 Intellectual property system.

Siterwell take responsibility to serve the community, revitalize the China's security industry, and make good governance, innovation, pioneering and enterprising. We have achieved several national security certification such as CE/ROHS/UL/SAL/VDS/NF/BSI/BOSEC/ KRIWAN/LPCB/ITS/ACTIVEFIRE.

For the future, we will seize the opportunity to innovate our own products and accelerate the process of internationalization to achieve economies of scale and leap-forward development and to become a leader security with international competitiveness and international reputation in China.









## HONOR ADVANTAGE

- June 2012 , we achieved VdS2344 certificate of smoke alarm;
- October 2012, we achieved BOSEC certificate of smoke alarm;
- August 2014, first factory who achieved VdS3131 certificate of smoke alarm in China mainland;
- September 2014, first factory who achieved NF certificate of smoke alarm in China mainland;
- March 2015, we achieved BSI certificate of carbon monoxide alarm;
- June 2015, first factory who achieved UL certificate of carbon monoxide alarm;
- August 2015, we achieved SAI certificate of smoke alarm;
- August 2016, first one who achieved UL certificate of smoke alarm in China mainland;
- Our three co alarms have got EN50291 certificate from LPCB, we are the first manufacture who get these certificate in china mainland;
- In 2017, we had the most AS3786:2014 certificate in China;
- December 2017, we got "Stiftung Warentest";
- In 2018, our fire alarm control panel passed 10th edition of UL864.
- In 2019, we passed new UL217 8th edition test and new UL268 7TH edition test.
- In 2019, we won IF Award and Reddot design award.
- In 2020, we obtained first VDS certificate of 10-year wireless interconnected smoke alarms in China.
- In 2020, we were the first company in China having CO alarms which passed EN50291-1:2018 new standards.
- In 2020, we were awarded StiWa Test winner again.
- In 2020, we won the German iF Design Award and the American IDEA Design Award.
- In 2021, we were recognized and recommended by German VdS institutions.
- In 2022, We became the first enterprise in Asia to pass the 8th edition of the UL217 smoke alarm standard.
- In 2022, we jointly established a global strategic cooperation laboratory with SGS.

### Certification of Quality Plan & Human Rights



### Product Certification we already got



## R&D ADVANTAGE



### Professional R&D Team

Currently, we own a professional R&D team, over 150 people, covering technical core personnel in multiple fields includes industrial design, electronic design, software design, product system verification, etc., to ensure the company's continuous research and development momentum, and speed up the product development.



### Four Independent R&D Bases

- Ningbo Hardware Research and Development Center: Mainly responsible for the research, development, and design of security smart terminal series products.
- Shanghai Technology Research and Development Center: Mainly responsible for the research, development and service of smart home and artificial intelligence.
- Shenzhen Hardware Research and Development Center: Mainly responsible for the research, development, and design of smart home hardware devices and security smart terminal products.
- Xi'an Wireless Research and Development Center: mainly responsible for the development of the Internet of Things platform and the development and construction of smart home hardware equipment.





## EQUIPMENT

- 3 Smoke tunnels from UK
- 3 test tunnels from Germany
- 1 test tunnel from UL
- 2 sets automatic carbon monoxide sensitivity calibration and test line

**SITERWELL own the most quantity imported test tunnels for smoke alarm  
and also the first factory who has automatic production line on CO alarm**



## Injection workshop

Full-automatic injection workshop with  
advanced central supply system.



## UL/EN Fire Test Room

We have the most advanced & accurate smoke alarm test in our UL&EN standard fire alarm test room.



## Thermostat laboratory

Constructed by a professional team from Siterwell and an advanced temperature environment simulation system, it can fully simulate actual installation scenarios and complete full functional testing of thermostat products.



## Full Anechoic DB Test Room

We have the advanced standard full silencer acoustic laboratory with advanced Danish B&K noise measurement system.





**SITERWELL**

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