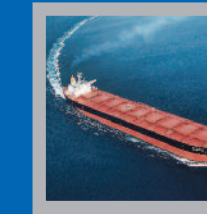
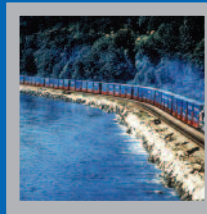


**FIRE DETECTION SYSTEM**



# BDS-4000

B-I BDS-4000 Model is a New Fire Detection System designed to meet different industrial characteristics and International Maritime Regulations. We are sure that most of clients will be satisfied with our New Fire Detection BDS-4000, an updated model of BDS-2000, BDS-2100 and BDS-3000.

The BDS-4000 can sequentially monitor both addressable and conventional detectors on one main control panel, which is capable of hosting up to 127 detectors per loop and can be extended up to 12 loops as an addressable system and 32 loops as a conventional system.

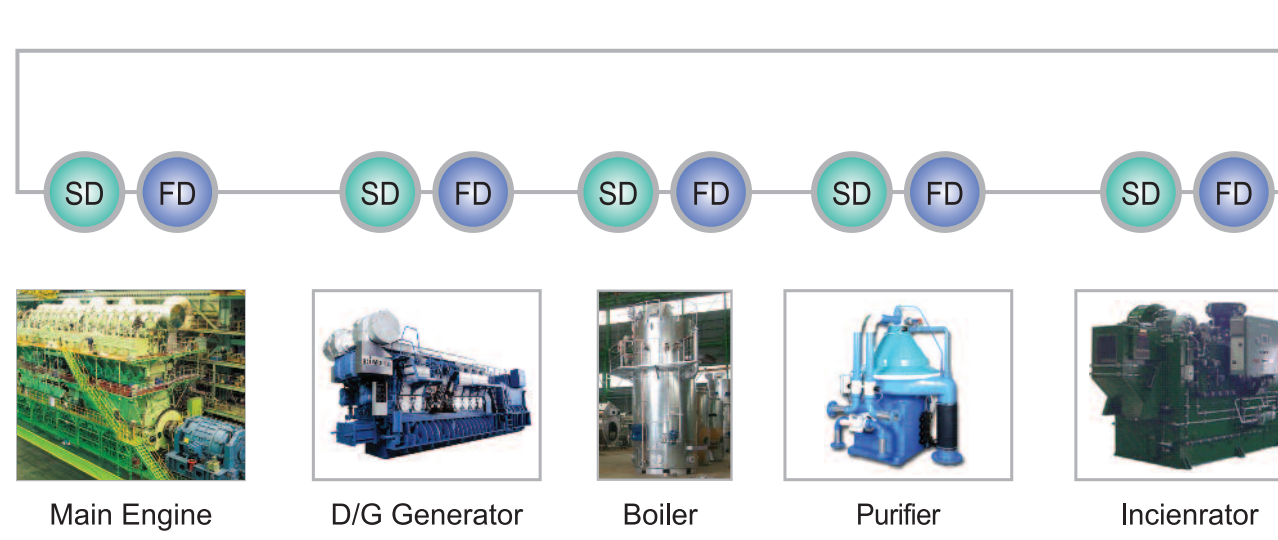
All data in Main Control Panel of BDS-4000, which is transmitted from Interface Unit connected with all detectors by loop circuit, are indicated on 7.0" Touch Screen of BDS-4000's Main Control Panel. BDS-4000 can be interfaced with our existing model BDS-2000 by RS-485 communication and all signals of BDS-4000 can be outputted to personal computer via built-in TCP-IP LAN port as well as data back up & software upgrade using built-in USB port.

The free arrangement of different types of detectors analyzing many different kinds of gases is one of the most important features and another feature is that the unlimited quantities of Detectors easily can be installed by adding small sizes of control panels.

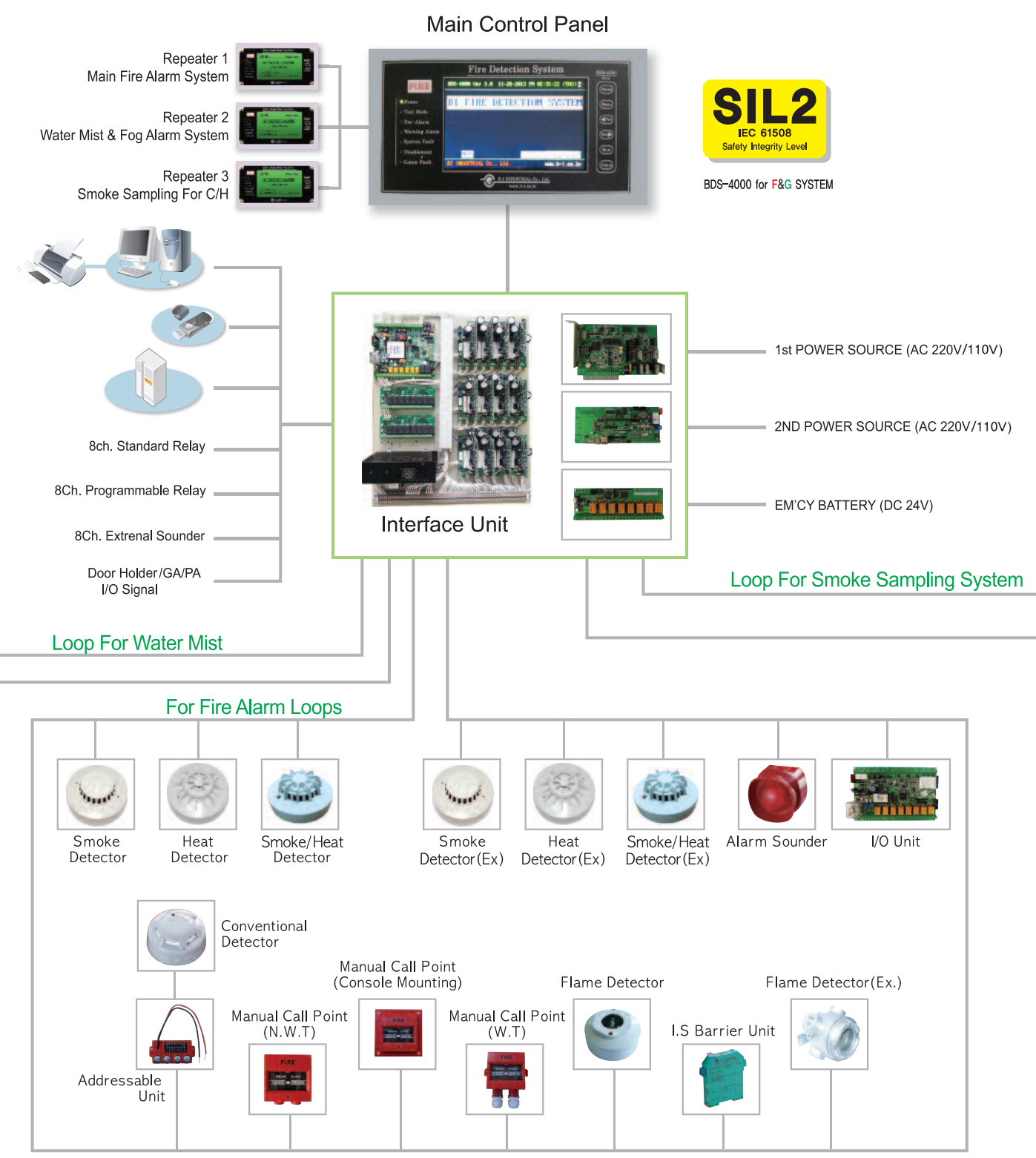
The system can be accessed and customized for various applications, offshore plant, building management system, petrochemical industries and other industries.

- Technical Specifications**
- 4 Analogue addressable loops (able to extend 12 loops) or 32 Conventional loops
  - Primary Power Source : AC 115 or 230VAC
  - Secondary Power Source : 230VAC or 24VDC
  - Emergency Battery : 24VAC 12AH
  - Power Consumption : 150W max.
  - Ambient Temperature : -5 ~ 55°C
  - Max. Cable Distance : 2km
  - Dimension : 272W x 138H x 72D mm
  - Weight : Approx. 5 Kg(Main control panel)
  - 8 Channel standard relay outputs (24VDC, 250VAC/2A)
  - 8 Channel Programmable relay outputs (24VDC, 250VAC/2A)
  - 2 Channel External sounder output (24VDC/2A)
  - 2 External DC output (24VDC/1A)
  - 1 TCP - IP LAN Port
  - 2 USB flash memory port
  - Tested according to EN54
  - Active & Passive Repeater by client's option
- Key Features**
- Fully Addressable and Conventional System
  - Combined Fire & Gas Detection System
  - High integrity, Comprehensive self check fault monitoring
  - Cost-effective Interface Network extend to various units for any applications
  - Unique Program for System Configuration
  - 7.0" Touch & Color active matrix TFT LCD
  - 8 LED Indications showing system status and 6 input Key

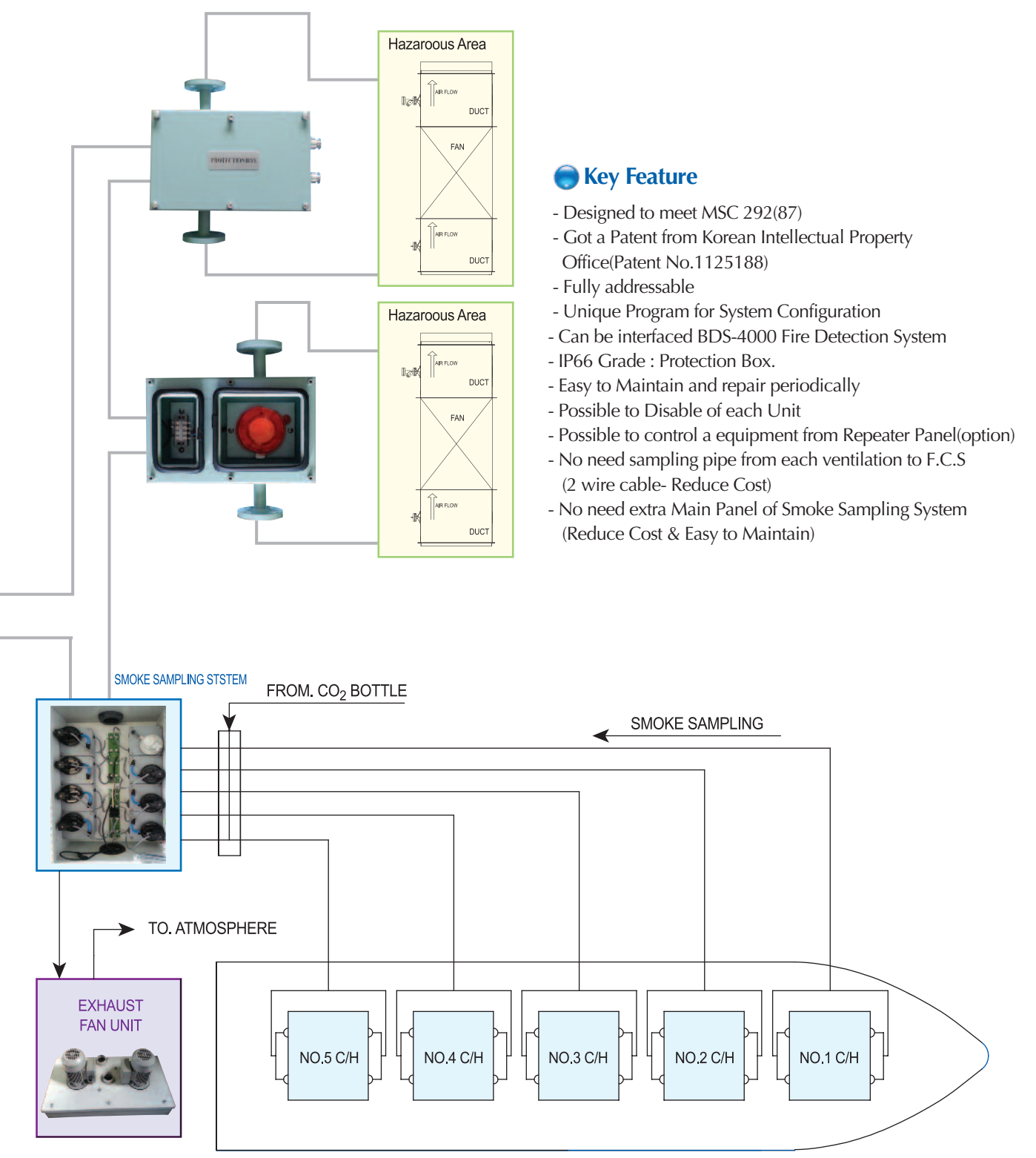
## For Water Mist & Fog Alarm System



## Main Fire Alarm System

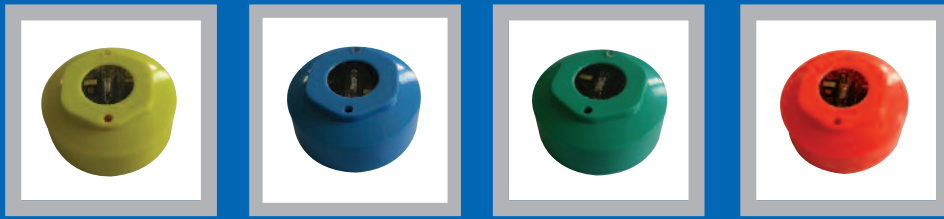


## Smoke Sampling System For Cargo Hold



- Key Feature**
- Designed to meet MSC 292(87)
  - Got a Patent from Korean Intellectual Property Office(Patent No.1125188)
  - Fully addressable
  - Unique Program for System Configuration
  - Can be interfaced BDS-4000 Fire Detection System
  - IP66 Grade : Protection Box.
  - Easy to Maintain and repair periodically
  - Possible to Disable of each Unit
  - Possible to control a equipment from Repeater Panel(option)
  - No need sampling pipe from each ventilation to F.C.S (2 wire cable- Reduce Cost)
  - No need extra Main Panel of Smoke Sampling System (Reduce Cost & Easy to Maintain)





## Flame Detector (Model : JINDOGAE-UV)

진돗개



JINDOGAE UV-Flame Detector was designed to meet strict industry performance requirements .  
The detector also incorporates a special logic circuit that helps prevent fault alarms caused by solar radiation. So, fault alarms are considerably reduced.  
This detector is packaged in a compact, lightweight housing for easy installation.  
Our Flame detector can be connected to a network by RS 485 serial communication wiring with other interface unit.  
It is specially designed as a general purpose flame detector for industrial applications to withstand "harsh" environmental conditions, including high temperatures, humidity, vibrations, and etc.

### Key Features

- Analogue Addressable UV Flame Detector
- High Reliability to minimize the malfunction and error for other light sources
- Fast and Adjustable Response for Fire (High Sensitivity UV Sensor)
- No influence from Environmental Factor
- Normal Working Distance : 40M, Certified Distance & Angle: 25M, 90°
- Slim & Robust Detector Housing
- Convenient Installation for all applications (Vessel, Power Generation, Petrochemicals)
- Real Time Monitoring and Interfacing through RS 485
- LED Indication for Detector Condition
- MED, LR, KFI Type Approval
- Test Report in accordance with EN54-10 is available

### Applications

- Power Generation Facilities : Engine & Generator Room, Unmanned Station
- Petrochemicals : Production, Storage, Shipping Facilities
- Warehouse : Storage Facilities for Flammable Materials
- Chemical Industry : Production, Storage, Shipping Facilities
- Painting Industry : Solvent handling, Presses, Drying Processes
- Explosive & Munitions : Handling & Storage Facilities

### Specification

- Output Signal: RS 485/ PLC / 4mA, 20mA
- Test report is available in accordance with EN54-10
- Spectral Response : 185 ~ 260 Nanometer
- System Voltage : DC 24V
- Operating Voltage : 10 ~ 30V DC
- Detecting View : 90° (Vertically and Horizontally 45°)
- Working Distance : 40M
- Certified Distance : 25M

## Flame Detector (Explosion Proof Type)



### Key Features

- Specially Designed to satisfy with application to stand "Harsh" Environmental Conditions.
- Explosion Proof Certificate by ATEX
- Typical Response times - 3 Sec' depending on Fire Sources, Size and Distance
- Convenient Installation and Maintenance
- High Compatibility with the existing systems

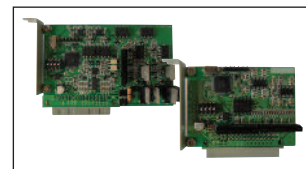
## System Components



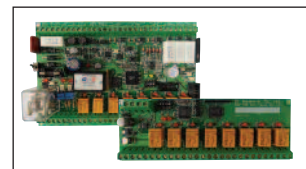
**Main/Repeater Panel**  
- Addressable & Conventional Panel  
- Real-time Monitoring  
- Compact Design & User friendly operation



**Interface Unit**  
- Interface with Main Control Panel by RS 485  
- Internal Battery  
- Various I/O Card, Communication Port



**Loop Card**  
- Addressable Extension Loop Card  
- Conventional Extension Loop Card



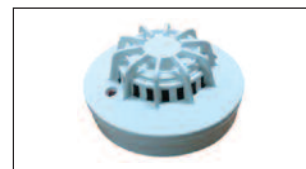
**Interface Card**  
- able to extend interface Card for any applications  
- RS 485 Data loop interface



**Smoke Detector**  
- Optical & Ionization Smoke Detector  
- Conventional & Addressable Detector  
- Remote test Features



**Heat Detector**  
- Ideal in environments that are dirty or smoky  
- Unaffected by wind or atmospheric pressure  
- Rejection of transient signals



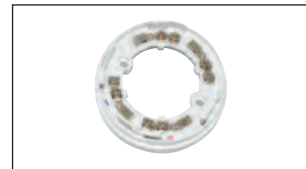
**Dual Detector**  
- Smoke and Heat Combined Detector  
- Ideal for a wide range of applications



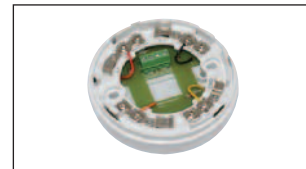
**Flame Detector**  
- Analogue addressable UV Flame Detector  
- No Influence from Environmental Factor  
- Long Detection Range (25 meter, 90°degree)



**Flame Detector (Ex)**  
- ATEX Certificate (Ex id T4)  
- Possible to install on Hazardous Area



**Mounting Base**  
- Detector Mounting Base  
- One Way Fit  
- Locking feature to prevent unauthorized removal



**Isolator Base**  
- Only accept the marine isolator  
- Detects wiring short circuits using patented technology  
- Isolating PCB for each device



**Manual Call Point**  
- Reports an alarm in under 0.2 seconds  
- Robust design  
- Waterproof & Explosion proof Type



**Flame detector tester**  
- Selectable Continuous for UV and Pulsing for IR and UV/IR  
- UV detector check up to 8 meters (26 ft)  
- IR and UV/IR flame detector check up to 4 meters (13ft)



**Detector Tester**  
- Individual Supply (Smoke, Heat & Flame Detector)  
- Up to max. 5meter with access poles



**Door Holders**  
- Tested and certified to BS EN 1155 and CE marked  
- Heavy duty all-steel construction

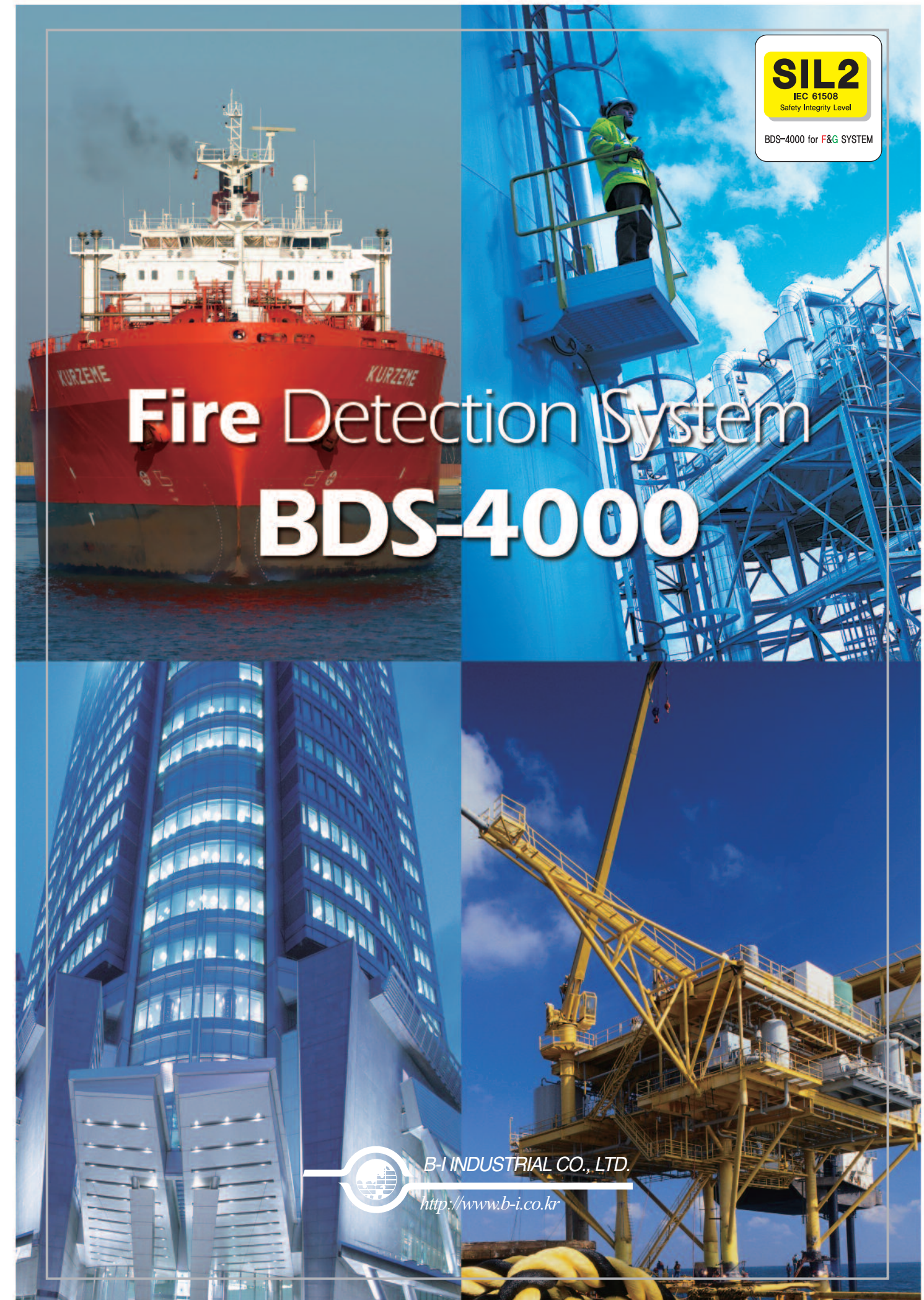


**Alarm Sounder**  
- Alarm Bell  
- Output is 100dB at 90°  
- Loop Powered  
- Wall Mounting

### Certificate



32, Gonghang-ro 767beonda-gil, Kangseo-Gu, Busan, Korea  
Tel.+82-51-441-5670(Rep) Fax.+82-51-441-6225  
Tel. +82-2-706-3077 Fax. +82-2-588-3076  
e-mail : international@b-i.co.kr



# Fire Detection System BDS-4000

**SIL2**  
IEC 61508  
Safety Integrity Level

BDS-4000 for F&G SYSTEM



B-I INDUSTRIAL CO., LTD.

<http://www.b-i.co.kr>