

**Panasonic**



# EBL512 G3 SYSTEM

Fire alarm solutions

Safety innovation, our passion

[www.panasonic-fire-security.com](http://www.panasonic-fire-security.com)

# EBL512 G3 system

## Comprehensive, scalable and highly reliable

EBL512 G3 fire alarm system is the result of more than 35 years of continuous innovation in fire alarm systems. A unique concept where each detector adapts individually to the environment, thanks to a detection technology based on Artificial Intelligence. Technology designed to provide early, safe and reliable fire detection even in the most critical environments and often, with unique assets.

**EBL**System



### Total integration

EBL512 G3 provides the full integration between the fire alarm system and the emergency and evacuation light system. All units are connected to the same COM loop providing full and individual control and monitoring of each unit.

### Easy for the integrator

EBLWin is the powerful and easy to use Windows based tool for planning, commissioning and maintenance of your EBL512 G3 systems.

#### Features

- › Easy programming with multiple options
- › Powerful check loop functions with full graphical presentation
- › Calculation of loop lengths, battery size and a summary of the installed devices
- › Support for several advanced auto-addressing functions, for new and existing installations
- › Creation of different types of installation reports to cover every need

PLANNING

**EBL**Win

MAINTENANCE COMMISSIONING



# Control Indication Equipment

## Powerful and flexible

EBL512 G3 is the third generation of Panasonic's intelligent addressable system, with a technology designed to provide comprehensive protection in any environment.

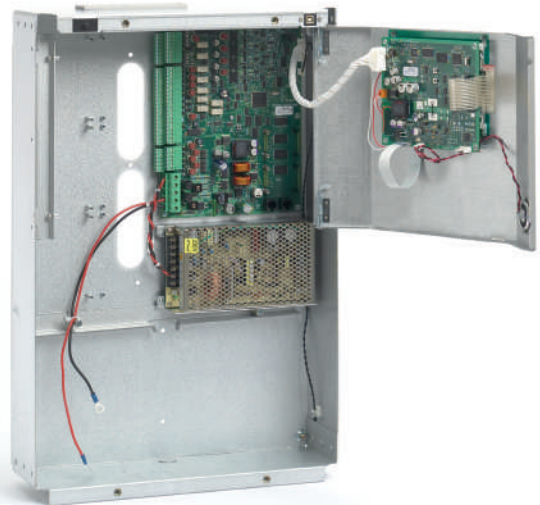
### Global solution

- › Certified against EN54-2, EN54-4 and EN54-13
- › 4 COM loops
- › 1.012 addresses for addressable loop units (512 alarm points)
- › Up to 16 COM loop repeaters per control unit
- › Integrated display and keypad including soft keys
- › Redundant network with up to 30 control units in a multi-master configuration
- › Continuous self-test of the control panel and detectors
- › Event log with up to 3.000 entries and expandable to 10.000 events
- › Graphical trouble shooting system
- › Automatic and manual addressing setting available
- › Prepared for remote monitoring and operation
- › Easy integration with third-party BMS and security management systems



### Heavy duty

- › Top quality metal housing with space for two pieces of 28Ah batteries
- › Built-in power supply capable of charging batteries up to 65 Ah in compliance with EN54-4
- › Redundant RS485 interface for direct connection of up to 30 display units
- › 4 monitored outputs, 2 relay outputs and 4 monitored inputs, all freely programmable. 2 alarm transmitting relays and 6 power supply outlets



- › Up to 6 expansion boards per control unit:
  - 4580** - 8 zone line inputs for conventional detectors
  - 4581** - 8 programmable relay outputs
  - 4583** - 3 outputs, 5 inputs

# Display unit

## A platform for innovation

Ever since the initial introduction of the display unit, it has been the clear strategy to add more and more innovative applications to the platform.

### Easy commissioning

All possible settings and options for the display unit are commissioned in the same intuitive EBLWin program, used for all other components in the fire alarm system.

### Highest security

The connection between the Control and Indicating Equipment and the display unit is completely redundant, both the RS485 connection and the 24 V supply.

## Applications

### Control of alarm devices

To optimise the evacuation process and ensure controlled evacuations, zone by zone. It avoids unnecessary activation of a control group by manual activation and deactivation.

### Control unit operations

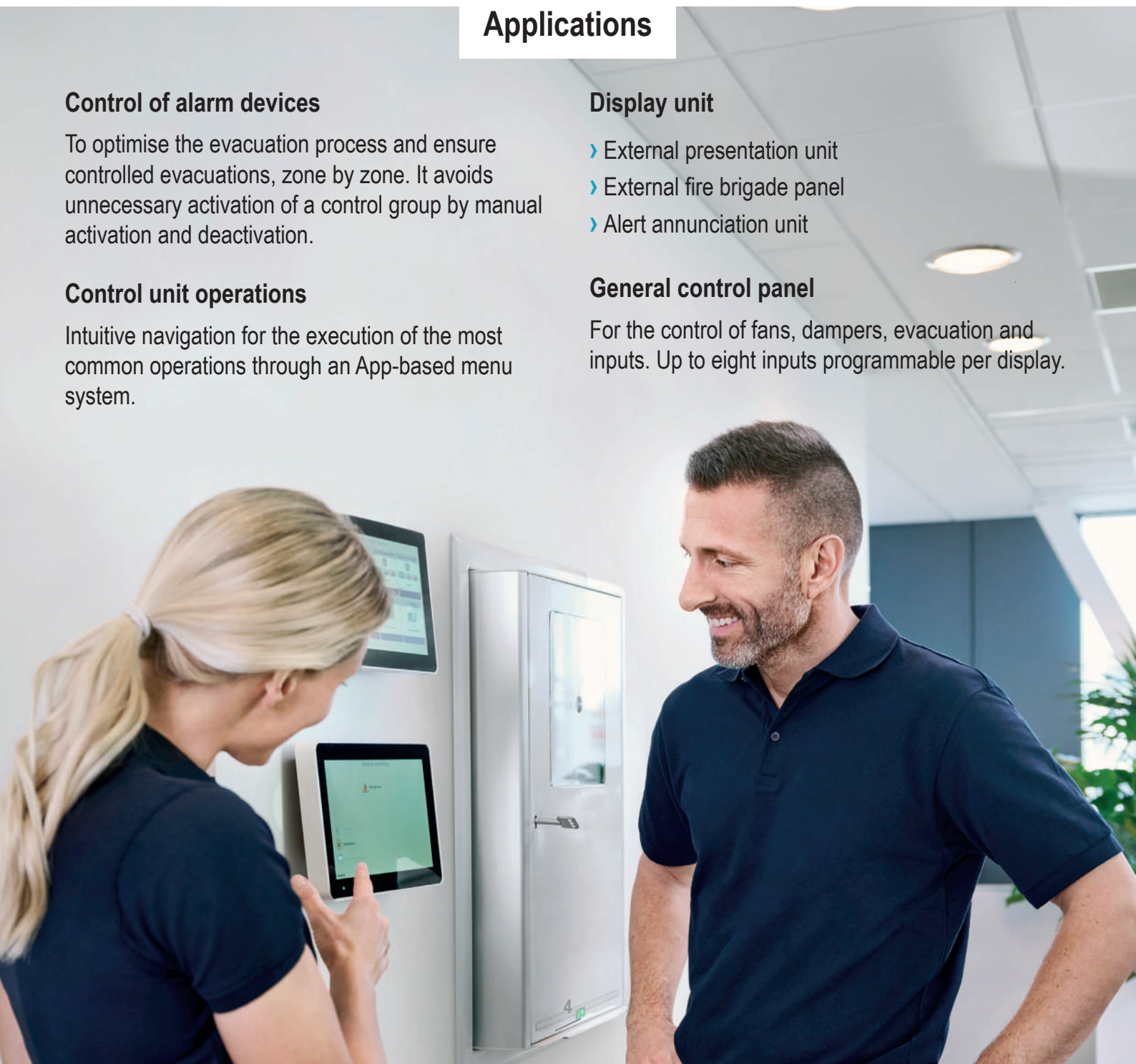
Intuitive navigation for the execution of the most common operations through an App-based menu system.

### Display unit

- › External presentation unit
- › External fire brigade panel
- › Alert annunciation unit

### General control panel

For the control of fans, dampers, evacuation and inputs. Up to eight inputs programmable per display.



# Integration and connectivity

## Remote monitoring and integration

The system can be securely monitored and operated remotely, and also be easily connected to building management or security management systems via a gateway with a very user friendly configuration in EBLWin.

### Gateway 5088



#### Remote monitoring

##### EBLApp

Simplifies commissioning and maintenance.

##### EBLWeb EBLWeb Monitor

Control and monitoring of distributed installations.

##### EBLCloud



#### Protocol interface

Integration with security management systems.



##### EBLTalk EBLNet



## EBLApp

Checks the EBL fire alarm system during maintenance or commissioning of the installation. The user can move around the installation verifying the fire alarm system on the screen of his mobile device.

### Features

- › Detector testing with report generation
- › Verify the function of all individual outputs in the system
- › Test of individual alarm devices
- › Activation of detector LED to simplify commissioning
- › Complete verification of the loop from a smartphone

## EBLWeb

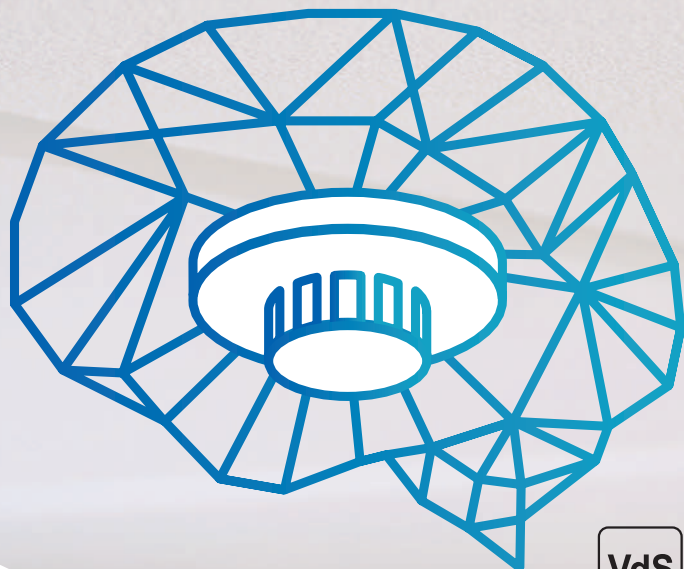
Used to remotely control and monitor an EBL fire alarm system via a Gateway. Secure login with different user levels.

## EBLWeb Monitor

It allows monitoring of several fire alarm systems at the same time, and supports easy management of image maps for full customization in every situation. Optimised for use on a PC, tablet or smartphone.

# Detection technology

## Detectors with Artificial Intelligence



VdS

### Unique learning function

By constant analysis of the environment and the use of artificial intelligence, Panasonic provides optimal detection performance in all environments.

From the day the detector is installed and as long as it is in use, the detector will monitor and evaluate the environment and automatically select the most suitable algorithm.

Switching between the different VdS approved detection algorithms is based on large amounts of sensor data to eliminate the influence of short disturbances.

### Highest safety and minimised risk for unwanted alarms

#### Smart flexible detector algorithms

In each of the algorithms there is a variable alarm level and also a variable time delay. The detector dynamically adjusts the alarm level and time delay, based on changes in the smoke density level and temperature before the default alarm level is reached.

#### Improved detector chamber with extremely fine mesh net

The unique mesh net with only 0.3 mm openings allows for a dramatic reduction in unwanted alarms caused by dust, small insects or other particles in the air.



Ø 0.3 mm

# Reliability with the best design



## **Constant smoke contamination monitoring**

All our smoke and multi detectors are equipped with automatic sensitivity compensation for contamination.

## **Tested not once, but twice**

Tested twice with real smoke during the production process.

## **Self diagnosis**

The detectors perform continuously internal checks of vital functions and components.

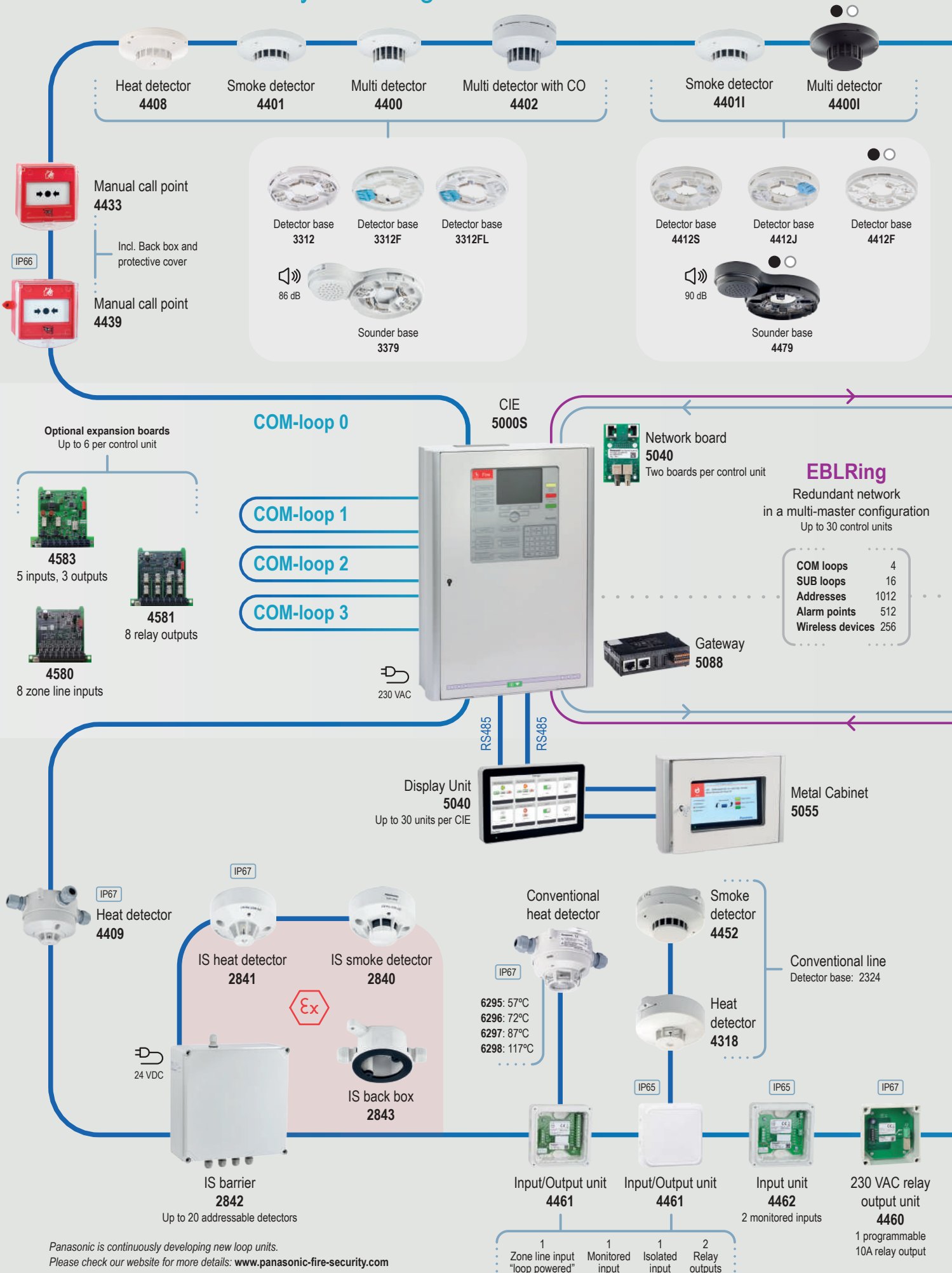
## **Automatic installation registration date**

6-25 years after installation, a technical warning is generated to meet national exchange regulations.

## **Design**

Cutting edge detectors that combine outstanding design and high reliability.

# EBL512 G3 system diagram



Panasonic is continuously developing new loop units.  
Please check our website for more details: [www.panasonic-fire-security.com](http://www.panasonic-fire-security.com)



230 VAC  
12-24V

BLE



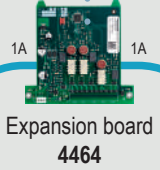
Aspirating smoke detector  
**AE2010G-P**  
Consult list of available acces.  
Doc. MEW01860

230 VAC

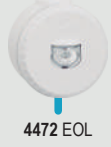


Power supply  
**4466**

24 VDC  
2 x 2A



Expansion board  
**4464**

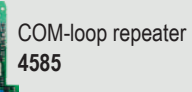


Conventional



4472 EOL

Local Alarm Acknowledge Unit  
**4445**



COM-loop repeater  
**4585**

Wall VAD  
**4480**



VAD  
**4381**

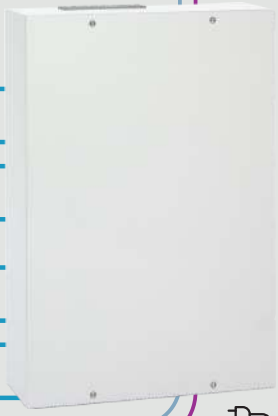


Sub-loop

Network board  
**5040**  
Two boards per control unit



CIE  
**5001S**



COM-loop 0

COM-loop 1

COM-loop 2

COM-loop 3

230 VAC



> 85 dB



Smoke detector  
**4611**

Addressable  
wireless system

Up to 16 units  
on each base station **4620**



Wireless base station  
**4620**  
Up to 4 stations in the loop

Local Alarm  
Acknowledge Unit  
**4645**



6 years



Manual call point  
**4614**

External indicator  
**4418**  
Addressable



24 VDC



Ceiling VAD  
**4481**



VAD with siren  
**4482**



Siren  
**4487**



# EBL System

MX Power box  
External 24 VDC is required from MX Power box



230 VAC

ISO 7010  
pictograms



MX25: 25 m  
MX40: 40 m



Exit light  
MX25 and MX40 red X



Exit light  
MX25 and MX40



Emergency light  
MX R and MX C

ISO 7010  
pictograms



MX IP65: 25 m



Exit / Emergency light  
MX IP65



Outdoor Emergency Light  
MX

COMPATIBLE BASES  
3312W, 3312FLW



LED 1h



LED 3h

# Decentralised architecture

## Continuous flexibility

The EBL512 G3 Control and Indicating Equipment has 4 loops, a perfectly matched power supply and a top quality metal cabinet designed for the required back up batteries. For total flexibility, the CIEs are available with or without MMI and are freely combinable within the 5040 network.

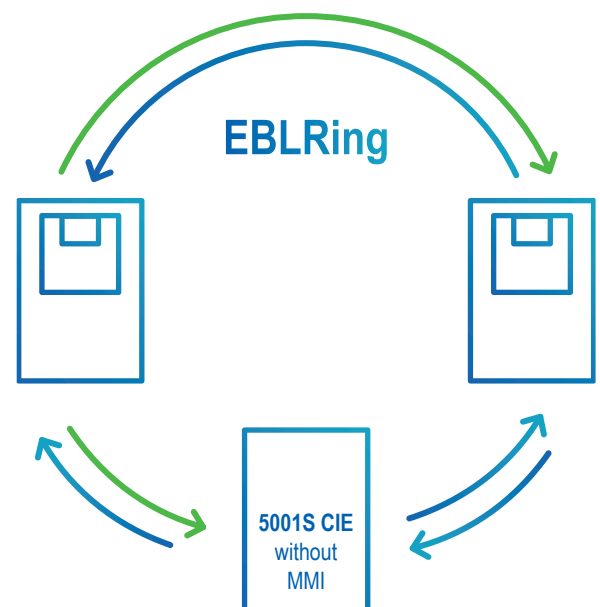
### 5040 network Scalability

The 5040 network is a redundant network in a multi-master configuration consisting of two rings operating in opposite directions. The cable type in the network can be either copper or fibre and different cable types can be combined as you wish in the different parts of the ring.

When the installation is expanding, it is just to install a new, perfectly adapted CIE within the 5040 network and place it wherever it is needed. In that way, we will always have perfectly matched equipment in the 5040 network and we can use the COM-loops in the most efficient way.

The redundant 5040 network requires two network boards that are plugged directly into the CIE main board and the connection of the network cables is done directly on the 5040.

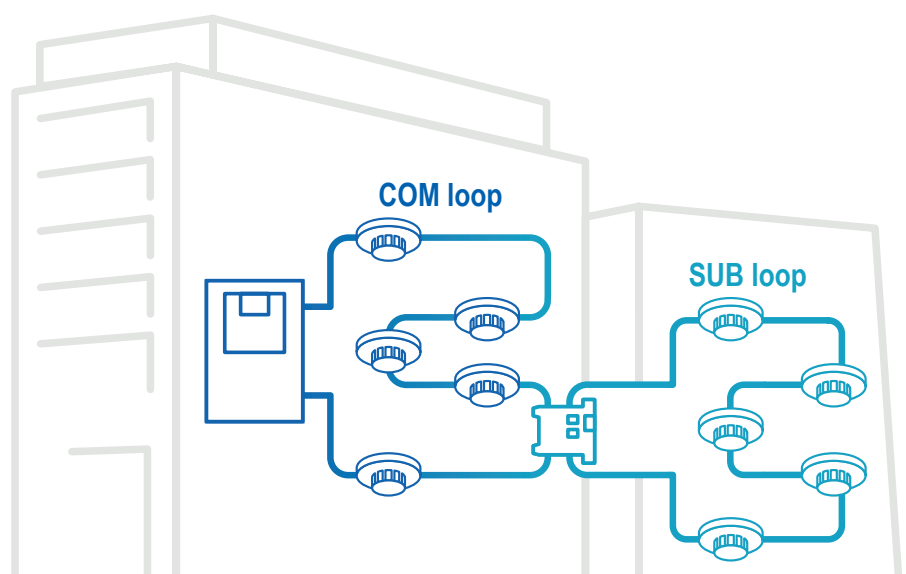
All network programming is done in EBLWin. No additional tools or software is required.



### COM Loop Repeater. Adaptability

With only an expansion board inside the addressable power supply, you are free to install it anywhere you want and get a new loop with the full power and distance.

It is the **most flexible solution available in the market** and ensures the adaptability of the detection system throughout the lifetime of the building.



# Extreme conditions

## Solutions for industrial environments

### Addressable smoke and heat detectors for IS classified areas



- › Up to 20 detectors can be connected to each IS barrier unit
- › Six advanced alarm algorithms available



#### Applications

Industry, spray painting areas or lubricant storages.

### IP67 addressable heat detectors for humid or outdoor environments



- › Standard and alternative algorithms for highest security
- › Automatic service signal to minimise maintenance costs



#### Applications

Food industry where a lot of cleaning with pressurized water may be needed, restaurant kitchens, shower rooms or changing rooms at sports arenas. Also, outside areas where you load trucks, logistics centres with diesel forklifts.

### IP67 heat detectors for extreme temperatures and conditions



- › High temperature range for difficult environments (-40°C to +110°C)
- › Fixed alarm temperatures (60/80/100/120°C)



#### Applications

Process industry (pulp, paper, plastics, chemical), food processing industry, manufacturing of motor and generators or spa and saunas.

# ASPECT

## Aspiration for all environments

Developed over decades, Aspect overcomes the most difficult conditions: large temperature changes, high amounts of dust, high humidity and corrosive gases.

### All in one


#### Everything you need in one housing

Addressable with built-in power supply and integrated filters, eliminates the need for external power supply, I/O units and external filters.


- › Up to four pipe inlets and dual sensors cover large areas with one single detector.
- › Smart detection with automatic calibration
- › Integrated event memory
- › Available in 2 versions: addressable directly connected into the COM-loop or conventional.
- › EN54-13, EN54-4 and EN54-20 approved



  
No need for external power supply

  
Resistant to dust and corrosive gases

  
For environments with condensation and high humidity

  
Two detection areas

  
BLE

  
Integrated battery

### Easy installation and commissioning

- › Only mains power and the loop need to be connected
- › Pre-glued connections and bends for fast and clean pipe assembly
- › Mounting console with up to four pipe connections. Just snap in detector and fasten with two screws when the pipe gates are completed
- › Self calibrating with no need for manual settings
- › Full control from Aspect Tool smartphone app

### Aspect Tool, App for faster and easier configuration



GET IT ON  
Google Play

Available on the  
App Store



**DUST**



**CORROSION**



**CLEAN ROOMS**



**FROM -30° UP TO +55° C**



**LOGISTIC CENTER**



**HUMIDITY**

# Addressable emergency and exit lights

## Evacuation, safer and smarter

### Addressable and integrated system

Emergency and exit lights are fully integrated with the fire alarm system. All units are connected to the same loop, making it possible to fully control and monitor each device individually. To make sure the addition of the lights does not compromise the loop length, all luminaires are powered by an external 24V supply.



#### Easy installation

Configuration with the same EBLWin software, used for the detection system.



#### Cost-effective

Only one control unit required for the fire alarm and emergency and exit lights together. No need for fire proof cables.



#### Environmentally friendly

Low power consumption and long product life time.

*From indoor to the harshest outdoor environments*



EN 60598-2-22 EN 1838 EN 62034 EN ISO:7010



### Adaptive exit lights

Fully software controlled exit lights that dynamically can switch to indicate that an escape route is unsafe to use, due to increased smoke levels.

Thereby it is possible to minimize the risk that people get exposed to dangerous fire gases during an evacuation.

# Installations with Panasonic detection technology

## Warsaw Metro

Expansion of its M2 line with an intelligent and flexible fire alarm system.

- › 49 EBL512 G3 Control panels
- › More than 8.000 Alarm points
- › More than 2.000 I/O units

## Metsä Fibre bioproduct mil

New Metsä Fibre bioproduct mill, the most efficient wood industry in the northern hemisphere.

- › 30 EBL512 G3 Control Panels
- › 6.000 smoke and multi detectors
- › More than 100 Aspect aspirating detectors
- › 20 km of linear heat detection with optical fiber
- › Full control of the extinguishing systems by simple programming of I/O units

## PTDC logistics Center

It is the logistics center of S-group's grocery business, the largest building in Finland.

- › 30 EBL512 G3 Control and Indication Equipment
- › More than 6.000 addressable multi / smoke detectors
- › More than 400 Aspect addressable aspirating systems
- › EBLGraphics monitoring system

**Panasonic Fire & Security Europe AB**

Barajas Park, San Severo 20,

28042 Madrid, España

+34 91 32 93 875

[info.pfseu.es@eu.panasonic.com](mailto:info.pfseu.es@eu.panasonic.com)

[www.panasonic-fire-security.com/es](http://www.panasonic-fire-security.com/es)

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