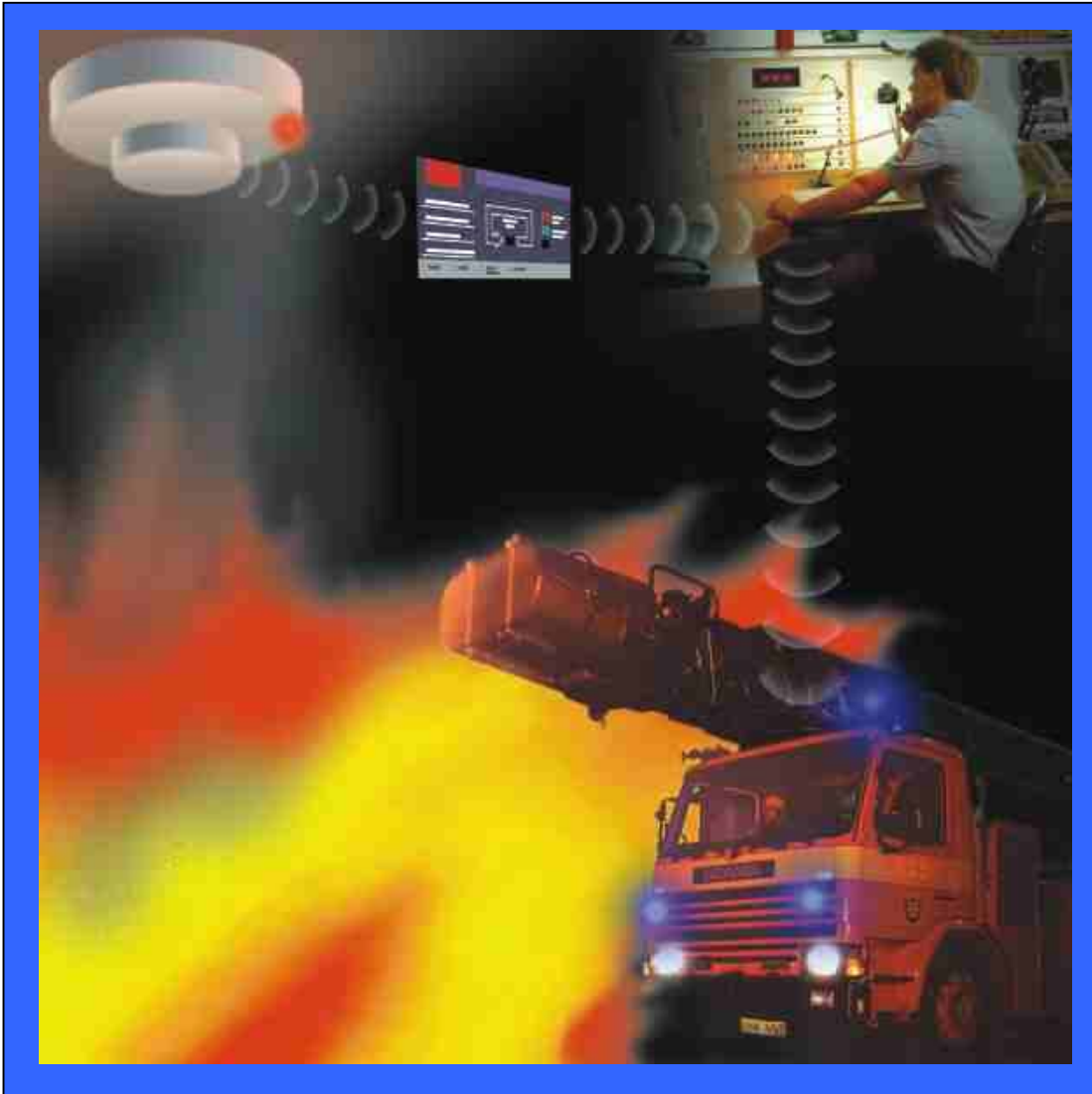


## Fire alarm system **EBL512 G3**



An analog addressable fire alarm system  
for early detection - without any unwanted alarms.  
Generation three – G3.

**Panasonic**

*The demands on fire alarm systems are increasing all the time. The most important task for a fire alarm system is an early detection of a fire in order to save life and property in different environments. Difficult detected fires, such as glowing / smouldering fires, have to be quickly and effectively detected.*

*On the other hand, you also want to reduce the nuisance alarms to a minimum, i.e. the system has to have a high sensitivity and a low sensitivity "at the same time".*

*The system is also exposed to an increasing number of interferences such as mobile phones and other disturbances from the surroundings.*

*All these demands require an intelligent system, i.e. both the control units and the detectors have to be intelligent. The system is **EBL512 G3**.*

### **General**

EBL512 G3 is an analog addressable **Control and Indicating Equipment** for fire alarm systems for buildings that fulfils the EN54 standards EN54 part 2 (C.i.e.) and EN54 part 4 (Power Supply).

One control unit can, on four COM loops, handle up to 1020 input and/or output units, of which 512 can be alarm points such as detectors and manual call points. Each loop unit uses one address.

Also conventional detectors can be connected to the system.



**Control and Indication Equipment EBL512 G3 with printer.**

EBL512 G3 can work as a single control unit or in a redundant TLON-network with up to 30 control units.

The total number of loop units in a system is accordingly  $30 \times 1020 = 30.600!$  Each control unit has  
2011-03-24

access to all information from the other control units in the same network.

### **EBL512 G3 - a unique concept for early and safe detection without any nuisance alarms**

EBL512 G3 is a user friendly fire alarm system with many unique functionalities and functions.

Advanced alarm algorithms for contamination compensation, self-diagnostics and inter activity makes the system suitable for almost any premises.

Each analog detector in the system is individually supervised and the sensitivity of each analog smoke detector is constant - in spite of any contamination or background particles in the detection chamber. The long-term changes, such as contamination, are treated differently from the short-term changes, such as smoke from a smouldering fire.

The self-diagnostic function detects every deviation from the accurate normal condition in the electronics and in the detection chamber.

The inter activity function is using information from one, two or a larger number of detectors in the system, to provide a more secure detection of a real fire.

A family of state of the art analog detectors gives the c.i.e. accurate

information about the occurrence of smoke and/or temperature changes in the installation.



The analog detector types 33xx (left) received a design award at the 1998 Hanover Exhibition. The newer analog detector types 43xx (right) have an even more attractive & slender design.

A large variety of units can be connected to the four COM loops:

- Analog smoke & heat detectors
- Water proof heat detectors
- Addressable manual call points
- Addressable short circuit isolators
- Addressable I/O units (inputs / supervised voltage outputs as well as relay outputs)
- Addressable sirens / sounder bases
- Addressable beacons
- Intrinsically Safe (IS) detectors
- Wireless smoke detectors
- Conventional detectors (via I/O units or via expansion boards in the c.i.e.)

**The EL512 G3 fire alarm system has a set of functions that meets the most stringent requirements related to fire detection, fire presentation and measures to be taken.**

- Automatic compensation for contamination, i.e. constant alarm sensitivity all the time.
- Service signal is given when a detector is contaminated to a certain level – the service level.
- A large number of alarm algorithms is supported by the system and can be set for each analog detector individually.
- Alert Annunciation. The output for the alarm transmitter can be

delayed for immediate on site investigation of a fire alarm.

- Individual detectors, zones, programmable outputs and outputs for the alarm transmitter can be individually disabled.
- Internally and/or externally controlled time channels. E.g. one or more alarm points may be disabled via a time channel.
- Outputs can be programmed in a very flexible way enabling control of sirens, fire doors, extinguishing systems etc.
- External **Fire Brigade Panels** and other **Display Units** can be connected to each c.i.e.
- Presentation of the actual system status in a PC via the **Web-server II** connected to an intranet (LAN) or Internet. Remote control with encrypted and safe two-way communication. In case of fire alarm, service signal etc. e-mails can be sent to the adequate personnel. Provides also one-way communication to an external computer system.

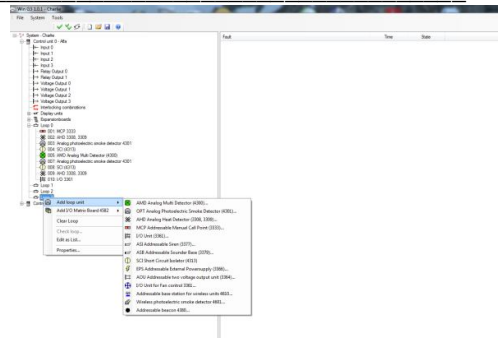
**Redundant TLON Network**

Up to 30 EBL512 G3 control units can be connected to a TLON Network. One of the units can be an external PC with a software driver for a Security Management system, which gives full control of and access to all data in all EBL512 G3 control units connected in the network.

For full network redundancy, two parallel networks are used. All network programming is done with the Windows based PC software **TLON Manager**.

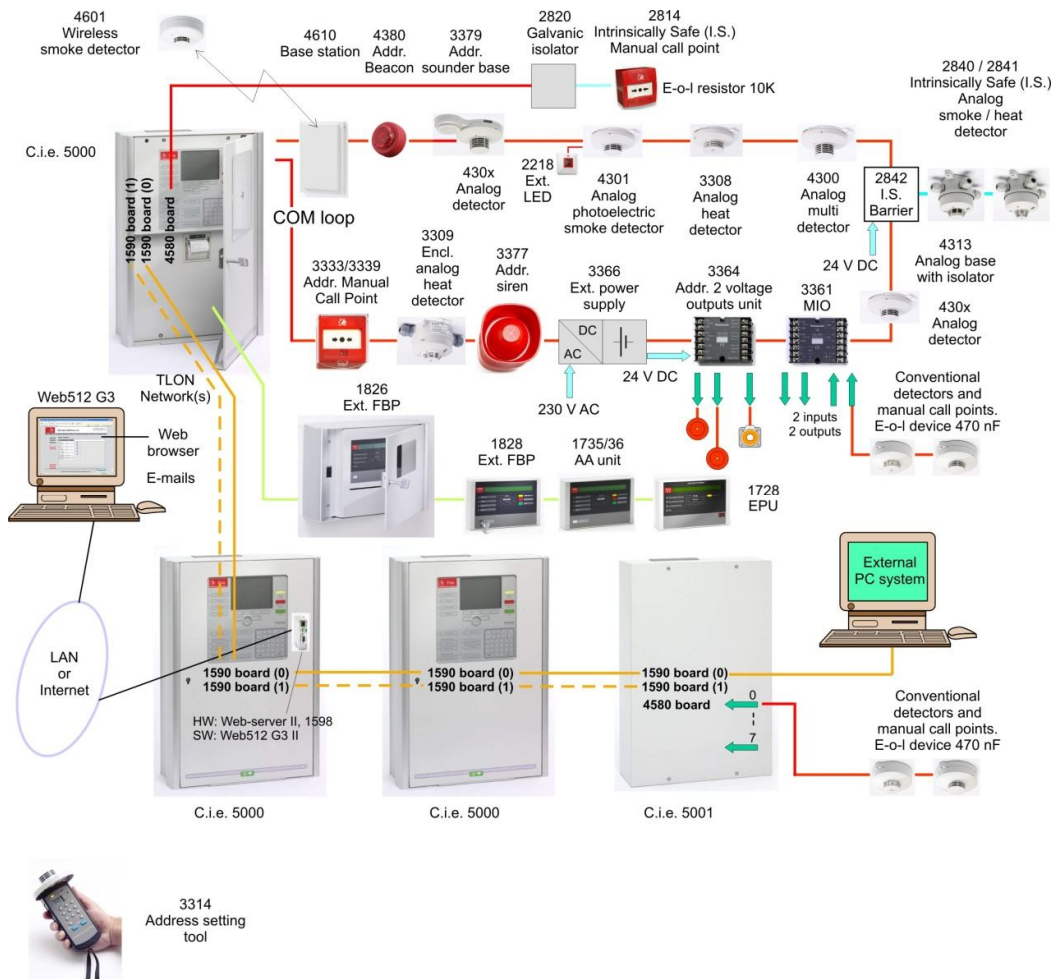
**Planning, commissioning and installation tool WinG3**

EBL512 G3 is a very complex system. In order to get the optimal performance and cost effective planning, installation, commissioning and maintenance of a system, we provide our distributors with a powerful tool - the Windows based PC software **WinG3**, which is a complete support packet for the EBL512 G3 system. All configurations, control unit and system settings are done via WinG3.



WinG3 is used when planning an installation. After the planning, the "site specific data" is downloaded to the control units. The data can also be uploaded. WinG3 is also used to download new software, etc.

**System overview**



## Products in the EBL512 G3 system

### Control and Indication Equipment (c.i.e.), etc.

5000	EBL512 G3 C.i.e. With or without a printer and with 128, 256 or 512 alarm points depending on the article number (5000xxx). Supplied with a standard mounting plate approved for an incombustible wall, e.g. concrete.
5001	EBL512 G3 C.i.e. A "grey box", i.e. no front, no display & no door with Plexiglas. 128, 256 or 512 alarm points depending on the article number (5001xxx). Supplied with a standard mounting plate approved for an incombustible wall, e.g. concrete.
5020	Mounting plate for a 19" mounting rack. (For one 5000 or 5001.)
5058	Mounting plate for an inflammable wall, e.g. wood. (For one 5000 or 5001.)
5013	Cabinet for drawings

### Expansion boards, etc.

4580	8 conventional zones expansion board (8 zone line inputs)
4581	8 relays expansion board (8 relay outputs)
4583	In & outputs expansion board
5089	Connection cable with connectors for of up to six exp. boards.
1598	Web-server II (SW: Web512 G3 II or OPC512 G3 II downloaded via a config. tool.)
1590	TLOn connection board (One or two boards required per c.i.e.)

### Display Units, etc.

1728	External Presentation Unit (EPU; Designation texts in Swedish / English)
1735 / 1736	Alert Annunciation Unit (AAU; Designation texts in Swedish / other language)
1826 / 1828	External Fire Brigade Panel (Ext. FBP; Metal / ABS plastic housing)

### Analog Detectors

3308	Analog heat detector *
3309	Analog heat detector, IP67
3312	Analog base (For analog detectors)
3312F	Analog base (For analog detectors) Fast connectors.
3312FL	Analog base (For analog detectors) Fast connectors. Ext. LED output.
4300	Analog multi detector *
4301	Analog photoelectric smoke detector *
4313	Analog base with isolator (For analog detectors)

\* Detector to be plugged in Analog base 3312 or 4313.

### Conventional Detectors (connected to a 3361 zone line input or exp. board 4580 zone line input)

2324	Base (For conventional detectors)
4318	Combination heat detector ** (59 degrees + rate-of-rise)
4350	Multi detector **
4352	Photoelectric smoke detector **
4375	Heat detector 60 degrees **
4376	Heat detector 80 degrees **
6295	Heat detector 60 degrees, IP67
6296	Heat detector 80 degrees, IP67
6297	Heat detector 100 degrees, IP67
6298	Heat detector 120 degrees, IP67

\*\* Detector to be plugged in Base 2324.

### Intrinsically Safe equipment (analog / conventional)

2840	IS analog smoke detector (incl. back-box). For connection to 2842.
2841	IS analog heat detector (incl. back-box). For connection to 2842.
2842	IS barrier unit (for 2840 and 2841)
2814	IS manual call point (conventional, connected via 2820)
2820	Galvanic isolator (connected via 4580 input)

### Other peripheral devices

2218	External indicator (ext. LED)
3314	Address setting tool for the units connected to the COM loops
3333	Addressable manual call point
3339	Addressable manual call point, IP56
3361	Addressable Multipurpose I/O unit (Two inputs & two outputs)
3364	Addressable 2 voltage outputs unit
3366	External power supply (Addressable)
3377	Addressable siren
3379	Addressable sounder base (for analog detectors 3308 and 430x)
4380	Addressable beacon
4582	I/O Matrix board (require also some kind of application board)
4610	Addressable Base station for wireless units
4601	Wireless smoke detector (incl. base)

