

Solution F2

Fire Alarm Control Panels – one step ahead.



■ The Fire Alarm Control Panel Solution F2



Solution F2 in B2 enclosure
(B01090-00)

■ The Concept

The "Solution F2" Fire Control Panel is a new generation, extendable and ultra modern Fire Control Panel for small applications. This has been developed to meet international standards and to satisfy specific international requirements at the highest level.

A lot of experience and know-how from the outstanding "Solution F1" Fire Control Panels have influenced the

development of this new Fire Control Panel.

Flexibility – especially for connecting different detectors – was one of the most important aims during the development of this new "Solution F2". Very remarkable: The "Solution F2" panel is compatible to the newest analogue addressable sensors of Hochiki and Apollo – two of the biggest and best

known players in the detector market worldwide.

The panel has as standard one loop module supporting 126 Apollo sensors or 127 Hochiki sensors plus 127 base sounders (only Hochiki), a power supply unit 230 VAC / 24 VDC with 2,5 or 3,5 Amps, a control panel with membrane keypad and graphics LCD module, USB and RS232 interface and several inputs

and outputs. The following extension modules are available:

- A second loop module
- I/O interface (2 sounder outputs, 3 relay outputs etc.)
- RS485 interface card
- 64 Zone LEDs modules

Depending on the configuration there is the choice of one of two sizes for the housing. The panel provides already as



Solution F2 – the key to more safety.



Solution F2 in A enclosure
(B01070-00)

standard a slot for an I-Module. That means an analogue or ISDN telephone modem can be plugged into the panel. By using the NSC configuration software the panel can be configured by remote access control.

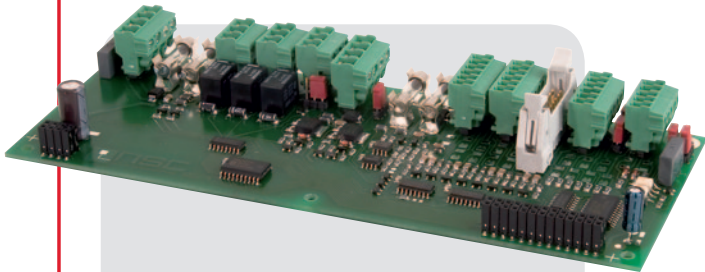
In addition, on the card location of the I-module the new NSC Web server can be plugged in. Then you have access to the "Solution F2" panel via any common internet browser.

Signal processing, indications and operating the panel are exactly according to the EN54

standard. All inputs and outputs are programmable. And for some more comfort there are soft keys below the LCD module and programmable push buttons for often used operating functions.

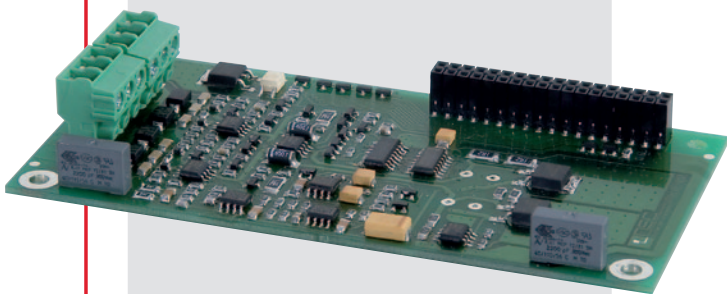
- **Intelligent Single-Loop Panel with comprehensive possibilities to extend for small applications**
- **Designed according to EN54 standard, part 2 and 4; VdS and CPD approved**
- **Supports Hochiki ESP sensors and modules as well as the Apollo ranges XPlorer, XP95 and Discovery**
- **Integrated Control Panel including graphics LCD module and internal Power Supply Unit 24 V/2,5 or 3,5 A**
- **PC configuration by the well-known and easy-to-use NSC configuration software (Windows XP.NET based)**
- **USB and RS232 interfaces included in the standard configuration**
- **Extension modules available for controlling of the German Fire Brigade Control Panel incl. transmission device, for RS485 interfaces**
- **User-friendly membrane keypad with programmable push buttons for user defined functions**

The extension modules



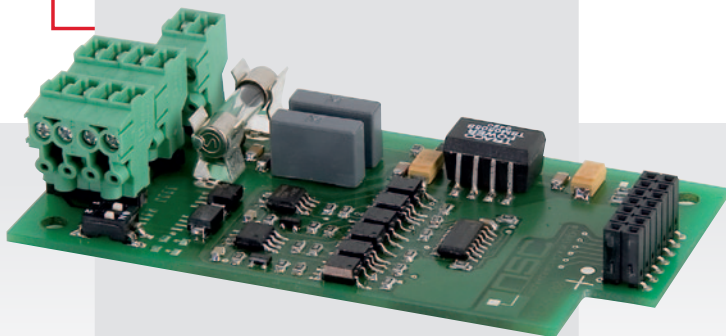
I/O Interface Card

- This module can be used as universal I/O module or as interface card for the Fire Brigade. It provides 3 programmable dry relay contacts, 2 programmable and monitored sounder outputs, 1 monitored input zone and 16 digital & programmable OC inputs/outputs.



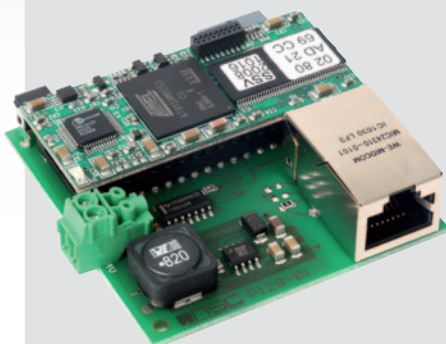
Loop module for second detector loop

- The second loop module supports also two protocols: Hochiki ESP sensors as well as all addressable Apollo sensors. In case of the ESP detectors 127 sensors/modules plus 127 base sounders are supported. In case of Apollo 126 sensors, modules and loop sounders are supported. The maximum cable length is 3.500 m.



RS485 Interface card

- The RS485 interface card provides two separate useful RS485 interfaces. So these can be used to connect building management systems (BMS) or LCD repeater panels. If you are using them as a redundant RS485 interface the German Fire Brigade LCD Repeater Panel (FAT) can be connected according to DIN 14662. The protocol and the baud rate are programmable by the "Solution F2" software.



Technical specifications:

Quiescent current: 38 mA (24 V DC)
Linux O/S Software with 2.6.24 kernel
10/100 Mbps Ethernet LAN interface
ARM9 CPU 192 MH
32 MB SDRAM
32 MB NOR Flash
3.3 V/300 mA
Dimensions: 56 x 56 x 20 mm

NSC Webserver Module

- Permits the access to NSC Fire Control Panels via the Internet without special software
- Use of the www infrastructure => e.g. by means of Internet Explorer, Firefox, Safari etc.
- User administration for 30 users
- Access by user name and password
- 9 different access authorizations
- Indicates all messages/status of the FCP
- Shows the complete event log
- Online control of the Fire Alarm Panel front facia
- Complete operation of the FCP Plug-in module

■ Manual Call Points, Loop Modules, Sounder/Beacons

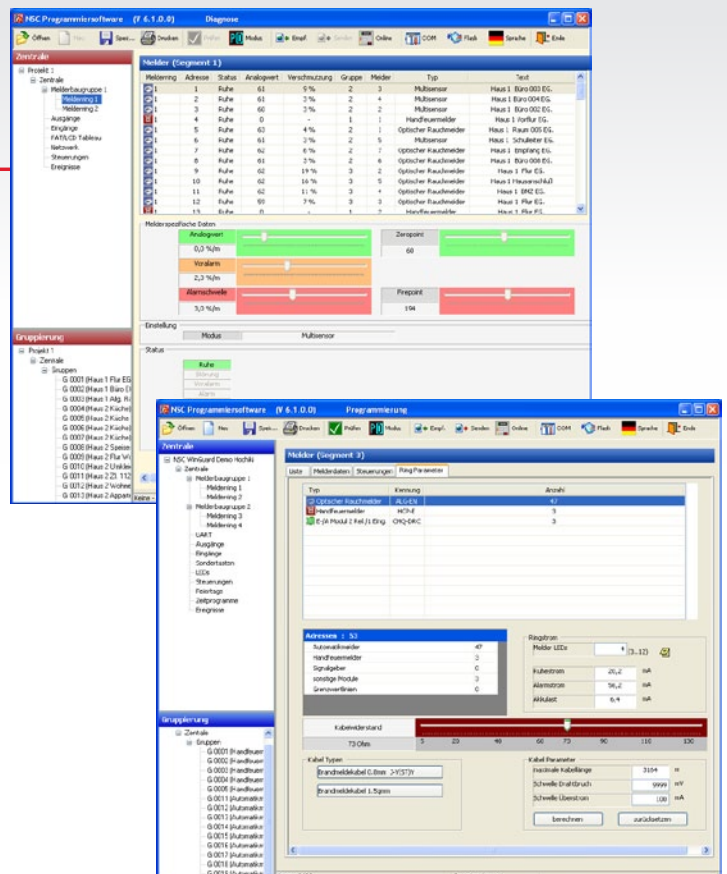


- Manual Call Points are available in two different versions: in a bigger enclosure for the German market and in a small enclosure
- They comply with the European standard EN54, part 11, and have international approvals
- Loop Modules are available as input modules, output modules and combined
- The modules are either mountable on a DIN rail or in an attractive surface mounted housing
- All modules can be ordered with integrated isolators and they are VdS approved
- The new base sounder provides 51 different tones and 10 different volumes (max. output 98 dB)
- On one loop 127 sensors/modules plus 127 base sounders are supported; as a matter of course this system is VdS-approved
- The base sounders can either be mounted onto a standard base or onto an isolator base
- In case of using detectors on top of the base sounder the base will be automatically addressed by the panel
- As an option the base sounder is available with integrated LED beacon
- The wall mounted loop sounder can be used for indoor applications (IP 42 rated) or with an optional weatherproof kit for outdoor applications (IP 65 rated)
- All the loop sounders distinguish themselves by a very low current consumption; typical 2 mA at 90 dB(A).

■ Software

Configuration software for Solution F1 and F2 panels

- Windows Explorer based software and so it is very easy and fast to handle
- Implemented by Windows.NET
- For configuration of detectors, zones, inputs, outputs, loops and spurs
- For analysing of analogue values / cable resistors / statistics / event memory
- Drag- and drop functionalities
- For use with analogue or ISDN modem as well



Compatible analogue addressable detectors

The Hochiki ESP detector range

Optical smoke detector ALG-EN with Flat Response Technology

- Photoelectric smoke detector which is fully compatible to the Hochiki ESP protocol.
- The ESP protocol is immune to noise and other communication problems such as loop cross-talk and data corruptions
- The ALG-EN incorporates Hochiki's unique 'Flat Response Technology' removing the need to use Ionisation Sensors in the majority of applications and this also allows the sensor threshold level to be increased, thereby improving the signal to noise ratio and reducing susceptibility to false alarms.
- 254 detectors / modules can be controlled per loop. In addition each address can support up to 16 sub-addresses.
- Automatic drift compensation.
- Sensitivity selection by software configuration of Fire Control Panel "Solution F2".
- Low power mode in case of mains AC fault.
- Detector address is electronically stored in a non-volatile memory within the sensor.
- Twin fire alarm LEDs give 360° viewing in case of alarm condition.
- Detector test by Solution F1 software
- VdS approval no. G 20 01 18 / 0832-CPD-0612



Multi Sensor ACA-E with Flat Response and Dual Channel Technology

- Multi Sensor which is fully compatible to the Hochiki ESP protocol.



- The ESP protocol is immune to noise and other communication problems such as loop cross-talk and data corruptions
- Several detection modes / algorithm programmable by the "Solution F2" Fire Control Panel (Photoelectric smoke sensor, heat sensor, combined sensor) and can be combined with timed cause and effects events.
- The ACA-E incorporates Hochiki's unique 'Flat Response Technology' removing the need to use Ionisation Sensors in the majority of applications and this also allows the sensor threshold level to be increased, thereby improving the signal to noise ratio and reducing susceptibility to false alarms.
- Unique Dual Channel Technology supplies separate analogue values for the photoelectric sensor as well as for the heat sensor.
- Other features like photoelectric smoke detector above.
- VdS approval no. G 20 01 20 / 0832-CPD-0114



Analogue addressable Heat Sensor ACB-E

- Heat detector which is fully compatible to the Hochiki ESP protocol.
- The ESP protocol is immune to noise and other communication problems such as loop cross-talk and data corruptions
- Fixed temperature detector and rate of rise detector according EN-54, part 5, with accurate temperature measurement.
- Sensitivity selection by software configuration of Fire Control Panel "Solution F2".
- Other features like photoelectric smoke detector above.
- VdS approval no. G 20 60 05 / 0832-CPD-0122

■ The Apollo range XP95 / Discovery

Analogue addressable Optical smoke detectors type XP95 / Discovery

- The "Solution F2" Fire Control Panel supports 100% Apollo's protocols XP95 and Discovery.
- Automatic drift compensation.
- Sensitivity selection by software configuration of Fire Control Panel "Solution F2".
- 126 sensors / modules per loop can be controlled by the panel software.
- Addressing by unique XPERT cards.
- All detectors VdS and CPD approved.



Analogue addressable Multi-Sensor type XP95 / Discovery

- Multi-Sensor comprises optical smoke and thermistor temperature sensors whose outputs are combined to give the final analogue value.
- Other features like optical smoke sensor above.



Analogue addressable Heat Sensor type XP95 / Discovery

- Heat Sensor which has a thermistor element to measure exactly the surrounding air temperature.
- Distinguishable by the low airflow resistant case.
- Other features like optical smoke sensor above.

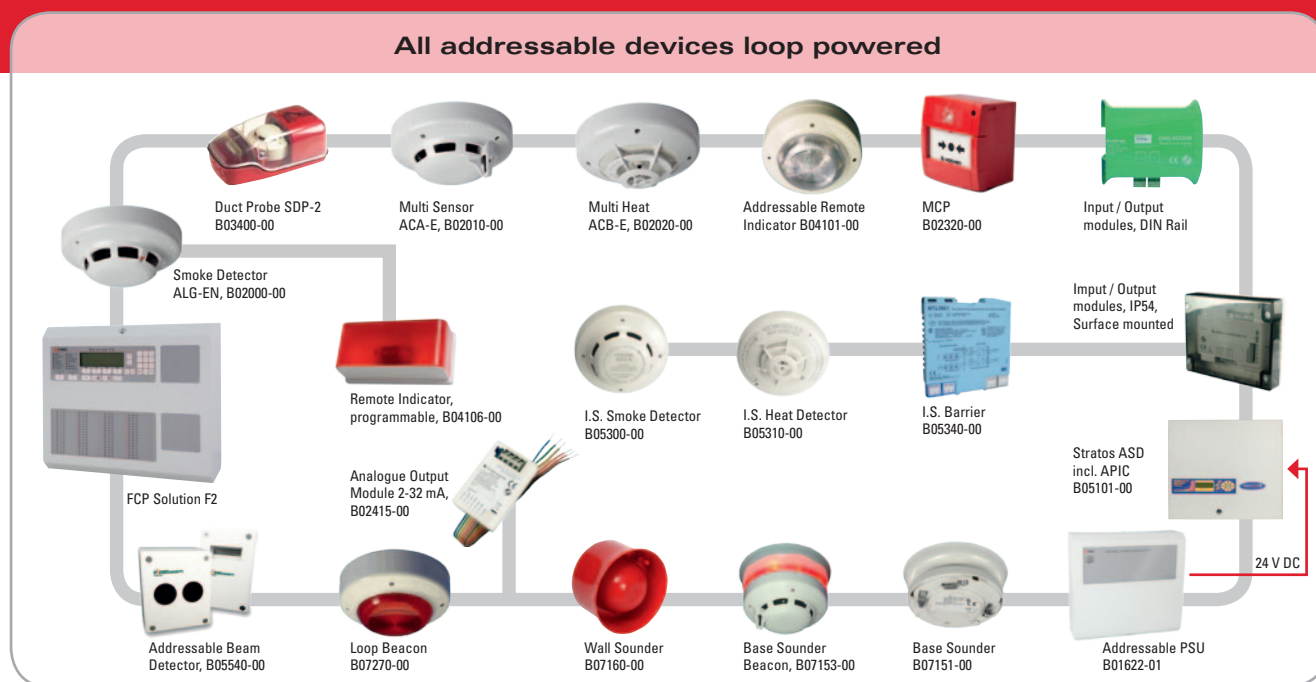


Addressable Manual Call Points

- ABS housing with integrated alarm LED.
- With interrupt mode for quick alarm response.
- Manual call point address is electronically stored in a non-volatile memory.
- In-built dual isolator



■ Typical loop configuration



■ Technical specifications

Supply voltage:	230V AC +10 / -15%, 50/60 Hz
Output voltage:	24 V DC
Power supply:	2,5 A (Housing A) / 3,5 A (Housing B)
Quiescent current consumption:	101 mA (24 V DC)
Operating temperature:	-5 °C – +40 °C
Battery charging:	24 V / 12 Ah (Housing A) 24 V / 24 Ah (Housing B)
Humidity:	Max. 95 %
Loops:	1 (standard), (2 = Option)
Loop current:	max. 450 mA per loop
Detector cable:	JY-(ST)Y 2 x 2 x 0,8 / max. 3.500 m
Protocols:	Hochiki ESP / Apollo XP95, Discovery
Detectors + sounders per loop:	Hochiki: 127 + 127 / Apollo: 126
Graphics LCD module:	240 x 64 dots
Event log:	10,000 messages
Relay outputs:	3 x, max. 30 V DC / 1 A (standard)
Open collector outputs:	8 x, max. 30 V DC / 60 mA
Monitored power outputs:	2 x 24 V DC / max. 500 mA
Dimensions housing A (B x H x T):	340 x 320 x 125 mm
Dimensions housing B (B x H x T):	500 x 380 x 170 mm
VdS approval:	VdS G 208 145 0786-CPD-20670 EN54-13 VdS S 205 024

■ Ordering information

Description	Part no.
Fire Control Panel "Solution F2" incl. 1 loop in housing A	B01070-00
Fire Control Panel "Solution F2" incl. 1 loop in housing B1	B01080-00
Fire Control Panel "Solution F2" incl. 1 loop in housing B2	B01090-00
PCB for zone indication by LED	B01220-00
Loop module for second loop	B01100-00
I/O Interface	B01110-00
RS485 Interface card	B01115-00
Relay card with 8 change over contacts	B01330-00
Analogue telephone modem module for configuration software	B01370-00
ISDN telephone modem module for configuration software	B01373-00
Configuration software	B01395-00
Webserver Module	B01380-00



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.