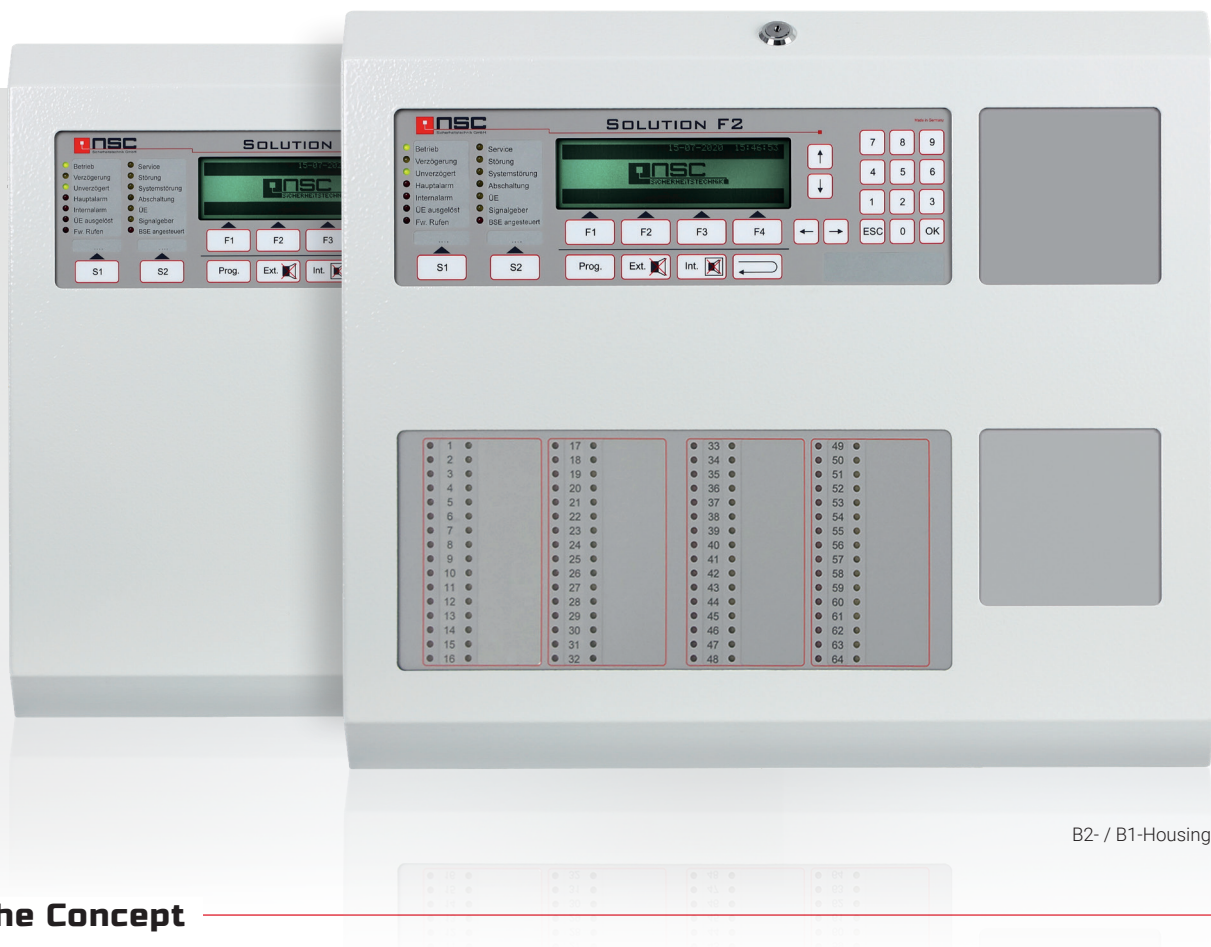


Solution F2

Fire Alarm Control Panels -
one step ahead.



The Fire Alarm Control Panel Solution F2



B2- / B1-Housing

The Concept

The „Solution F2“ fire alarm control panel offers flexibility combined with a modern and cost-effective solution. Innovation also for smaller objects.

National and international standards as well as multiple market requirements are taken into account. Tailor-made, at the highest level, without compromises and of course VdS approved.

Flexibility also in the selection of detectors - The „Solution F2“ is compatible with the latest, addressable detectors from Hochiki and Apollo - two of the largest and best-known detector manufacturers worldwide.

The panel comes as a standard with one loop module supporting 254 Apollo-Core sensors or up to 127 sensors and 127 base sounders with Hochiki's Enhanced System Protocol. A power pack 230 VAC / 24 VDC with 3.5 amps, control panel with membrane keyboard and graphic display, USB and RS-232 interfaces as well as numerous inputs/outputs.

The NSC webserver can also be installed in this compact fire alarm control panel. The „Solution F2“ then offers access via any standard Internet browser.

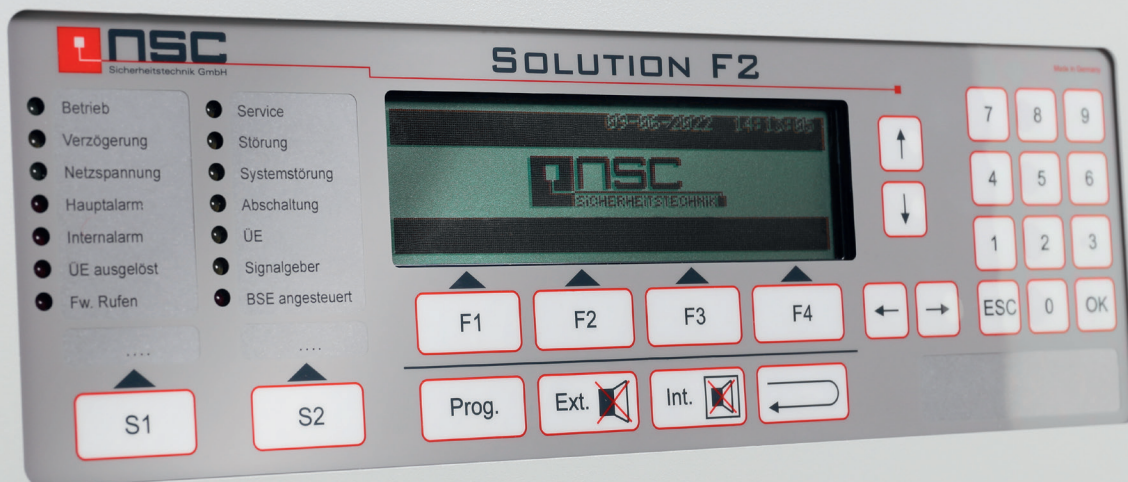
The signal processing, the display and the operating functions are tested and certified according to EN54. All inputs and outputs are freely programmable. Additional convenience features include softkeys below the display and freely programmable macro keys that can be used for the most frequently used operating functions.

The following expansion modules are available:

- Second loop module, B01100-00
- I/O interface B01110-00 (B housing)
- Interface card RS-485, B01115-00
- Zone display, B01220-00 (only B2 housing)

Depending on the expansion of the control panel, you can choose between two housing sizes (A and B housing):

- A housing (B01070-00)
- B1 housing (B01080-00), B2 housing (B01090-00)



A-Housing

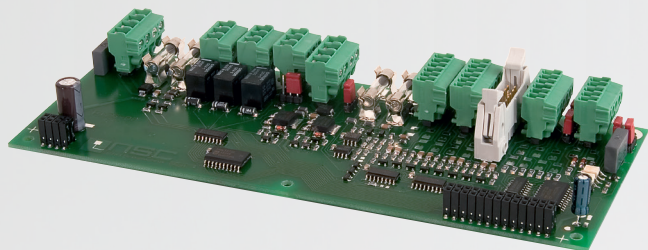
■ Key-Features

- Intelligent, compact one-loop control panel for smaller applications with extensive expansion options.
- Structure and function according to EN54, part 2 and 4; VdS and CE certified.
- Compatible with Hochiki ESP detectors and modules as well as with the Apollo detector series XP95, Discovery and Soteria.
- Control panel with graphic display and switching power supply 24V / 3.5A integrated.
- PC programming using well-known and convenient NSC configuration software (based on Windows.NET).
- Offers a USB and RS-232 interface as standard
- Extension modules can be installed into the fire panel for fire brigade peripherals and a redundant RS-485 interface.
- User-friendly membrane keyboard with soft keys and freely programmable macro keys.

■ Technical specifications

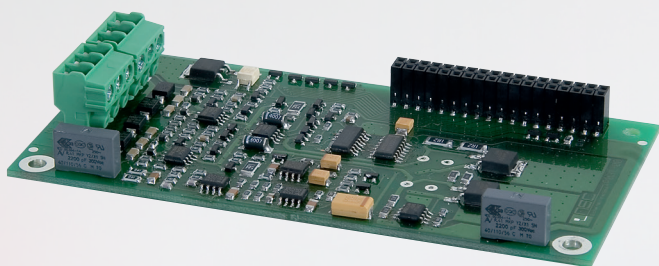
Supply voltage:	230 V AC +10 / -15 %, 50 / 60 Hz
Output voltage:	24 V DC
Power supply:	3.5 A
Quiescent current consumption:	101 mA (24 V DC)
Operating temperature:	-5°C ~ +40°C
Battery charging:	24 V / 12 Ah (Gehäuse A) 24 V / 24 Ah (Gehäuse B)
Humidity:	Max. 95 %
Loops:	1 (standard), (2 = Option)
Loop current:	max. 400 / 450 mA pro Ring
Detector cable:	JY-(ST)Y 2 x 2 x 0.8 / max. 3.500 m
Protocols:	ESP Hochiki / Apollo XP95, Discovery, Core
Detectors + sounders per loop:	Hochiki: 127 + 127 / Apollo: bis zu 254 Teilnehmer
Graphics LCD module:	240 x 64 pixel
Event log:	3.000 Meldungen
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 (WxHxD):	340 x 320 x 125 mm
Dimensions housing B (WxHxD):	500 x 380 x 170 mm
Approvals:	VdS G 208145 // 0786-CPD-20670 EN54-13 // VdS S 205024

■ The extension modules



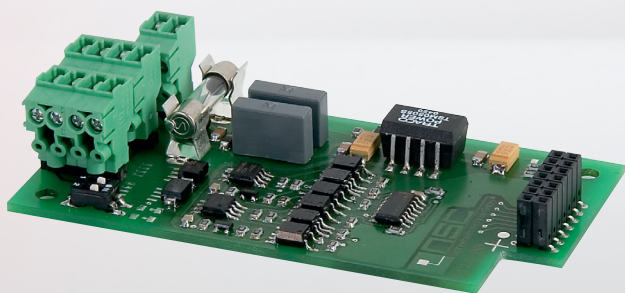
■ I/O Interface card - B01110-00

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.



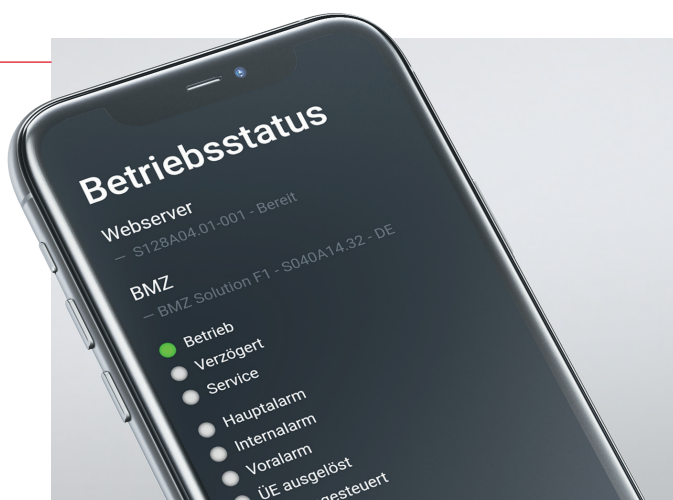
■ Loop extension module - B01100-00

The second loop module also supports the Hochiki ESP detector protocol and all addressable Apollo detectors. 127 detectors/modules and an additional 127 base sounders (Hochiki) or up to 252 participants (Apollo-Core) can be used on one loop. The maximum cable length is 3,500 m.



■ RS-485 Interface card - B01115-00

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.



NSC Order-No.: B01380-00

Operating system: Linux O/S Software (2.6.24 kernel)

LAN: 10/100 Mbps Ethernet LAN-interface

Processor: ARM9 CPU 192 MH

Storage: 32 MB SDRAM, 32 MB NOR Flash

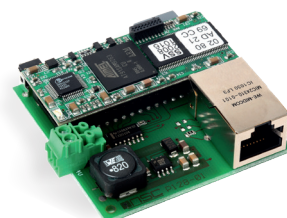
Quiescent current: 38 mA (24 V DC)

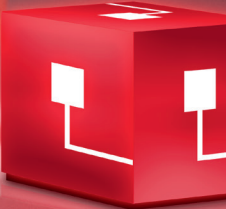
Dimensions: 56 x 56 mm

Power supply: 3,3 V / 300 mA

■ NSC Webserver Module

- Plug-in module for Solution F1 & Solution F2 main board.
- Displaying all messages of the fire panels in real-time
- Online display of the control panel with all status information.
- Complete operation of the FCP
- Enables access to any NSC panel via Internet using a standard browser.
- User management with username and password, email address and 9 different access permissions.
- E-mail dispatch in the event of an alarm/fault
- Encrypted connection via SSL
- Event memory and log file with respectively 10,000 entries
- Creation of support data via webserver for remote diagnosis or backup.





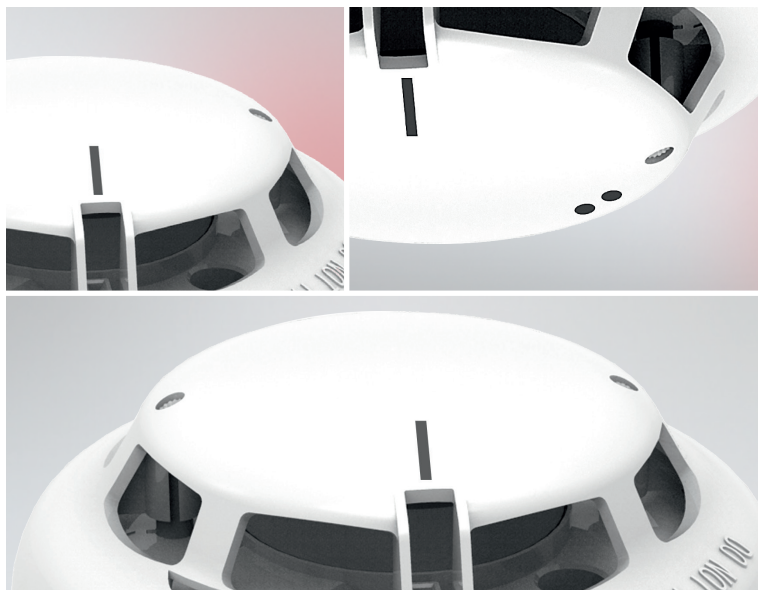
Cc

- Figure 1**



■ Compatible analogue addressable detectors

Hochiki ESP-Top-Loop detectors with integrated isolator



Key Features

- Programmable detection algorithm (operation mode TM)
- With ESP protocol and so immune against EMC interferences
- Flat-Response-Technology for optimized smoke detection. This provides a considerably extended range of response to combustible materials (broadband detectors)
- Automatic drift compensation at contamination => constant sensitivity
- The sensitivity can be adjusted by software to the environmental conditions
- Low Power Mode in case of Mains AC fault
- Electronic addressing (Flash)
- Twin fire alarm LEDs give 360° view in case of alarm condition

Optical smoke detector ALN-EN

- 3 modes can be switched automatically or depending on time or event.

NSC Order-No.:	B02003-00
VdS-No.	G 218026
CE-Certificate	2831-CPR-F1927

Multi sensor ACC-EN

- Contains optical and heat sensors
- 4 automatic detection modes or timed by cause and effect events

NSC Order-No.:	B02012-00
VdS-No.	G 218018
CE-Certificate	2831-CPR-F2015

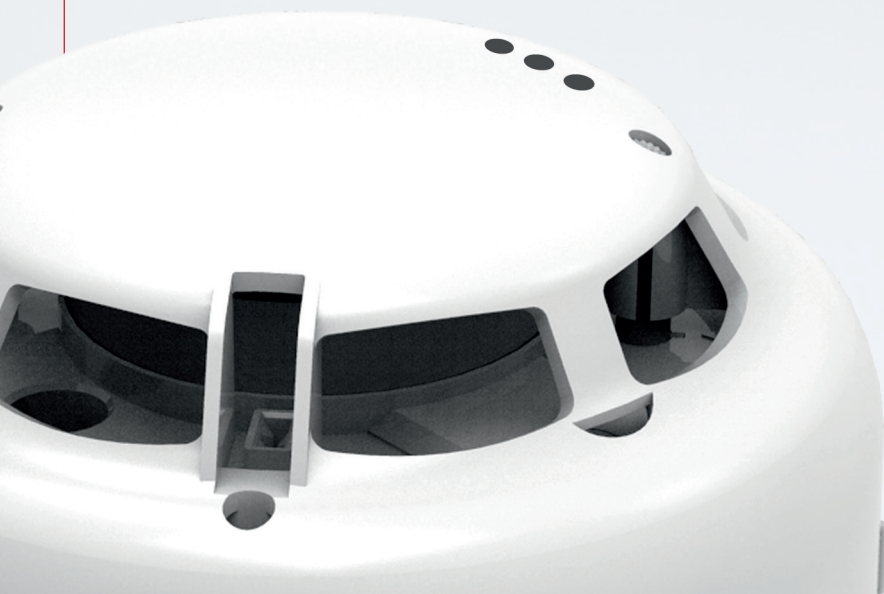
Multi heat sensor ATJ-EN

- Contains both fix temperature and rate of rise temperature heat elements

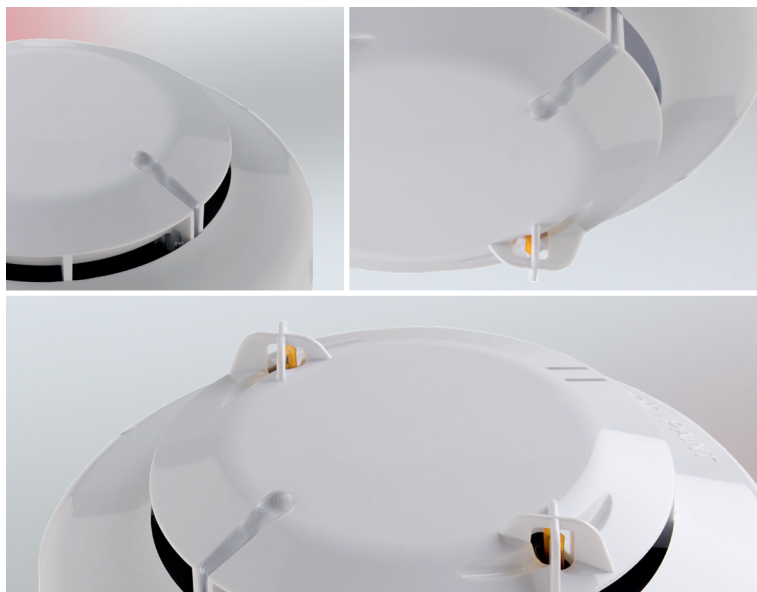
NSC Order-No.:	B02023-00
VdS-No.	G 218019
CE-Certificate	2831-CPR-F1929

Multi sensor ACD-EN

- NSC Order-No.: B02015-00
- contains optical, carbon monoxide (CO) and multi-heat-detector
- provides 24 different modes: automatic, manual or time-/event dependent switchable
- 10 years operational lifetime of CO-Sensor
- VdS approved according to EN54-5, EN54-7 and EN54-29
- LPCB tested and approved according to EN54-26, EN54-30 and EN54-31
- CE-Certificate: 2831-CPR-F1761



Apollo SOTERIA detectors



Key Features

- Addressable via XPERT8-card or through Soft-Addressing via the control panel**
- FasTest function reduces service time for detector maintenance significantly*
- Up to 254 detectors (+ 254 base alarm devices) per Loop**
- Dual-Isolator integrated
- Connector for remote indicator
- Locking mechanism (grub screw)
- PureLight technology reduces the risk of false alarms and increases significantly the reliability of the fire detection.
- Tri-coloured 360° LED status indicator (alarm, fault resp. isolator activated, polling)

** use of CoreProtocol is mandatory

Optical Smoke Detector

- Protection class: IP44
- 5 different EN54-approved operation modes (sensitivities, etc.) on board and selectable via the control panel

NSC Order-No.:	B02900-00
VdS-No.	G 216027
CE-Certificate	2531-CPR-CSP10983

Multisensor (Smoke/Heat)

- Offers a combination of a smoke detector with a dual heat sensor. It can be switched to detect smoke, heat or a combination of both offering the highest degree of flexibility
- 5 different EN54-approved operation modes (sensitivities, etc.) on board and selectable via the control panel.
- Can also be used as a single-criteria detector

NSC Order-No.:	B02904-00
VdS-No.	G 216028
CE-Certificate	2531-CPR-CSP10987

Heat Detector

- 8 different EN54-approved operation modes (A, B, C class acc. to EN54-5) on board and selectable via the control panel.

NSC Order-No.:	B02906-00
VdS-No.	G 216026
CE-Certificate	2531-CPR-CSP10979



Dimension - Deckenbündiger Rauchmelder

- NSC Order-No.: B02920-00
- Flat design (almost invisible)
- Supports XP95, Discovery and CoreProtocol
- High-end smoke detection without smoke chamber via infrared LEDs and photcells
- Integrated short-circuit isolator
- Addressable via 8-Bit DIL switch
- Approved according to EN 54-7, EN54-17 and VdS
- VdS G 218020
- CE 2531-CPR-CSP10950

NSC SmartRevision

One man maintenance app for Fire Alarm Systems

Commissioning of a fire alarm system

According to DIN, a complete test of all detectors is required when the fire alarm system is first commissioned. Only then the facility is able to be presented to an expert for necessary acceptance. This requires a considerable amount of work and time, even in the case of small and medium-sized systems. In most cases, mix-ups in the programming or in the detector labeling are not reliably determined.

The „smart“ inspection

Two technicians are often required on site to ensure compliant maintenance. SmartRevision now offers the possibility of servicing NSC fire alarm systems much faster, easier and more cost-effectively. The additional technician who has to keep an eye on the messages of the control panel with the conventional test method is no longer necessary. In addition, maintenance becomes much more pleasant for the technician!

SmartRevision

With the NSC SmartRevision app, the maintenance technician receives a real-time voice output of all messages from the fire alarm control panel (FCP) on his smartphone. This means he can immediately compare the voice message with the labeling on the detector on site! In objects with a lot of ambient noise, wearing headphones that output the audio signal of the mobile phone reduces the noise exposure.

Key-Features

- Using the NSC SmartRevision as inspection and maintenance support including maintenance log.
- Maintenance app with maximum increasing the efficiency of classic maintenance.
- Enables a legally secure 1-man revision on site (depending on network and on-site cellular resources).
- Voice output of the detector designation
- Immediate feedback from triggered detector
- Connecting a smartphone and the NSC FAS-Tool via QR code and get started.



In the known app
stores available!

Scan the QR code
with your phone.

