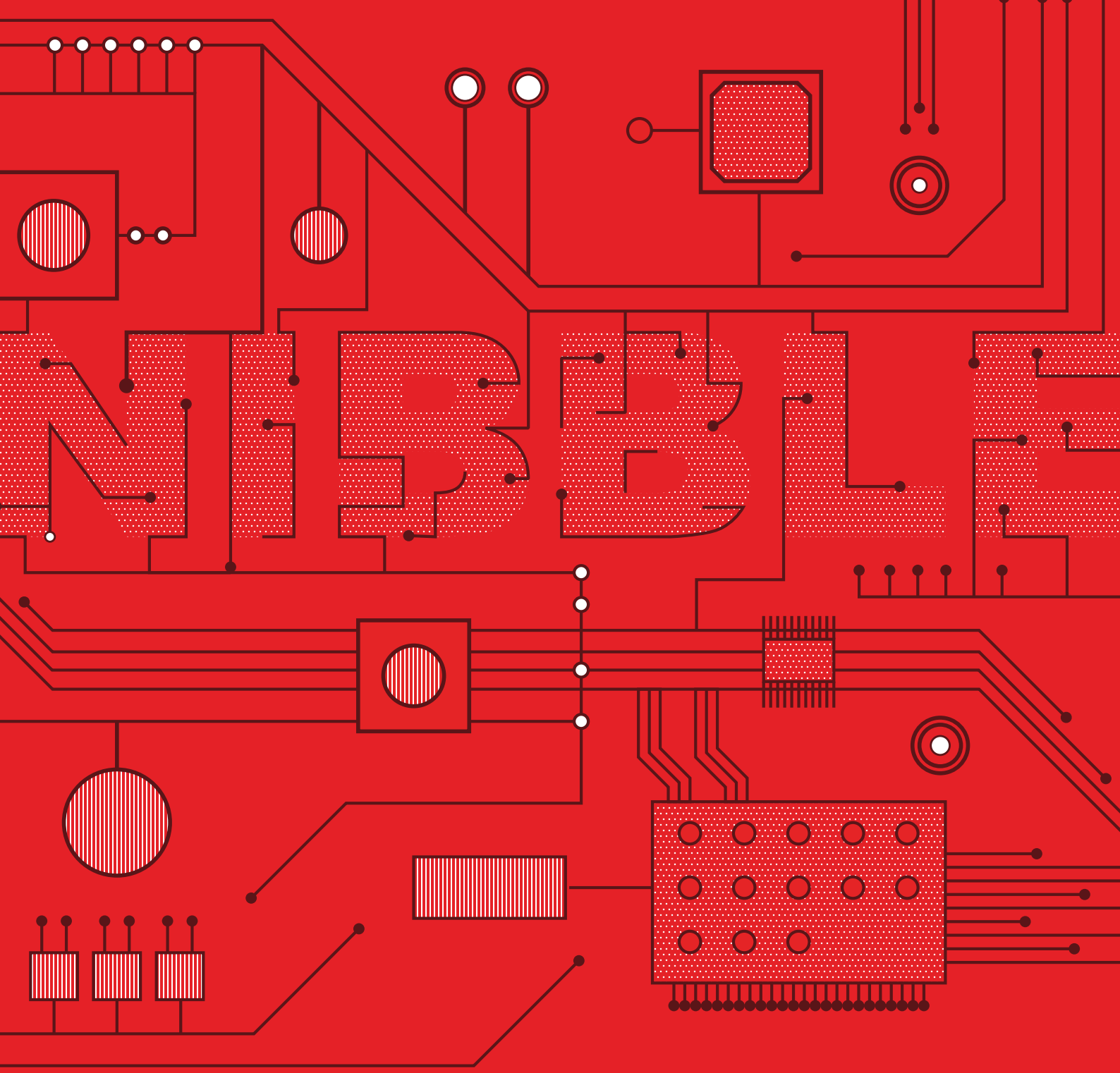


Product Catalog

NIBBLE

Contents

ABOUT NIBBLE

NIBBLE is a Portuguese manufacturing company founded in 2004.

We specialize in Electronics Engineering Project Management and Development with internal R&D. We seek to be a market reference of excellence in products and solutions, which are entirely developed and manufactured by NIBBLE.

Our core business consists of products and solutions in areas such as Security, Domotics, GPS and GSM/GPRS, LED Lighting and Electronics, which are a reference in the national and international market.

Project & Consulting is one of our competitive advantages, distinguished by great skills, specialized know-how and strong internal R&D, which comes from NIBBLE's long experience from a wide range of projects with national and international importance, entirely conceived in Portugal.

NIBBLE is a trademark and its products are in conformity with CE marking. that means in conformity to the European Directive that have been an investment on quality and distinction.

NIBBLE collaborates focused on to achieve results and goals which are proposed by its Customers and Partners. Always counting on precious support of its own team, they are committed with integrity, dignity and respect for people and the rules.

NIBBLE is committed to continuously improve and maintain customer satisfaction, with the best solutions.

NIBBLE continuously innovating...

MISSION

To contribute to a world where technology serves the welfare and safety of everyone, developing innovative and technologically advanced products and solutions of excellence.

VISION

NIBBLE aspires to be a company of reference, with international expression and acknowledgment of skills in R&D regarding the integration of electronic and telecommunications technology in all products and solutions developed and where people feel good, motivated and imbued with corporate values and culture.

VALUES

NIBBLE invests continuously on innovation, technical training and expertise though its strengthen

R&D

NIBBLE invests continuously on innovation, technical training and specialized know-how, through its internal R&D. Its products and solutions are designed and developed to provide an efficient response to customers and market needs, adding value that allows for differentiation and competitiveness.
NIBBLE also seeks to contribute to the creation of wealth supported on the systematic and sustainable growth of portuguese products and services, in order to add value to their employees, partners and customers.

Excellency and Quality

NIBBLE reinforces a high quality and excellency management of the design and production process of its products and solutions, as well as in stakeholder relations, promoting synergies and dynamic relations with its customers and partners.

NIBBLE provides management based on good practices and satisfaction of its customers.

Trust and partnership

Trust and partnership are the pillars of relations, as they promote crucial workforces and synergies. NIBBLE values trust and works hard to maintain the high levels of reliance and cooperation which stakeholders are used to.

NIBBLE formalizes institutional relationships and creates affective and associative ties with its Customers, Suppliers and Employees because it considers that all of them are part of TEAM NIBBLE.

SERVICES

Product development
Consulting & project
CAD/EDA and PCB Prototyping

ACCREDITATION

CERTIFICAÇÃO DE SISTEMAS
NP 4457
SGS

COTEC
Portugal

CE

WIPO
WORLD
INTELLECTUAL PROPERTY
ORGANIZATION

FIRE DETECTION

ANALOGUE ADDRESSABLE SYSTEM

As a result of its investment in R&D, NIBBLE launched a new addressable analogue fire detection panel to face the biggest and most demanding market challenges. The establishment of a strong partnership with one of the world's largest manufacturers of fire detectors such as APOLLO through the integration of their devices in the NURIA panel demonstrates NIBBLE's product development capacity and its know-how in the fire detection market.

NIBBLE Analog Addressable Fire Detection System consists of the NURIA Fire Panel and the APOLLO SOTERIA, Discovery, XP95 and Xpander (wireless) product family. The NURIA panel is one of the first in the world to integrate the Core Protocol for SOTERIA products.

In projects with characteristics and requirements that favour wireless technology, the XPANDER product family is recommended

NURIA SOTERIA®

DISCOVERY® XP95

Learn more at nibble.pt

Nuria PANEL

NURIA

NURIA is a functional panel, easy to install and extremely robust, composed of a modular metal box, allowing the extraction of its door for easy access to its interior, maintaining functional access to all the electronics of the panel. The electronics are removable, which allows the box to be installed on site before the electrical connections phase. Its installation can be built-in or surface-mounted and can work in a network of up to 32 panels.

MAIN FEATURES

- Up to 4 loops;
- Up to 32 panels and networked repeaters;
- Compatible with Apollo XP95 / Discovery protocol (up to 126 devices per loop);
- Compatible with Apollo CoreProtocol protocol (Soteria) (up to 254 devices per loop);
- 120 customizable and configurable zones;
- Network communication with redundancy: Ethernet and CAN;
- 4 voltage monitored outputs;
  - 2 for fire;
  - 2 for sirens;
- 1 fault output;
- 3 relay outputs;
- 2 auxiliary voltage outputs;
- 12W of power per loop;
- 150W power supply;
- 2 12V 15Ah lead acid batteries;
- Optional external box capable of accommodating 6 12V 15Ah lead acid batteries;
- Logical programming of events;
- Firmware update via USB stick;
- MicroSD card support for event registration.

TECHNICAL SPECIFICATIONS

Power supply
100 240 VAC,
50/60 Hz 150W

Batteries
Min: 2 x 12V 15Ah in series
Max: 8 x 12V 15Ah in pairs of 24V

Screen
7 "resistive touch screen
(800x480)

Operating environment
Indoor use Temperature: -5 to 45ºC
Relative humidity: <95%
(without condensation)

Maximum number of zones
120

Maximum number of loops
4

Maximum number of devices
126 per loop (Apolo XP95 / Discovery)
254 per loop (Apolo CoreProtocol)

Fire Ouputs
2x monitored: 28V ¹ 100mA

Siren outputs
2x monitored: 28V ¹ 500mA

Fault output
28V ¹ 100mA (when off)

Auxiliary outputs
2x 28V ¹ 1A shared

Relay outputs
3x 250VAC 5A

Terminating resistance (monitored outputs)
10 kΩ

Maximum battery impedance
800 mΩ

Network
CAN + Ethernet

External memory devices
Micro SD card + USB flash drive

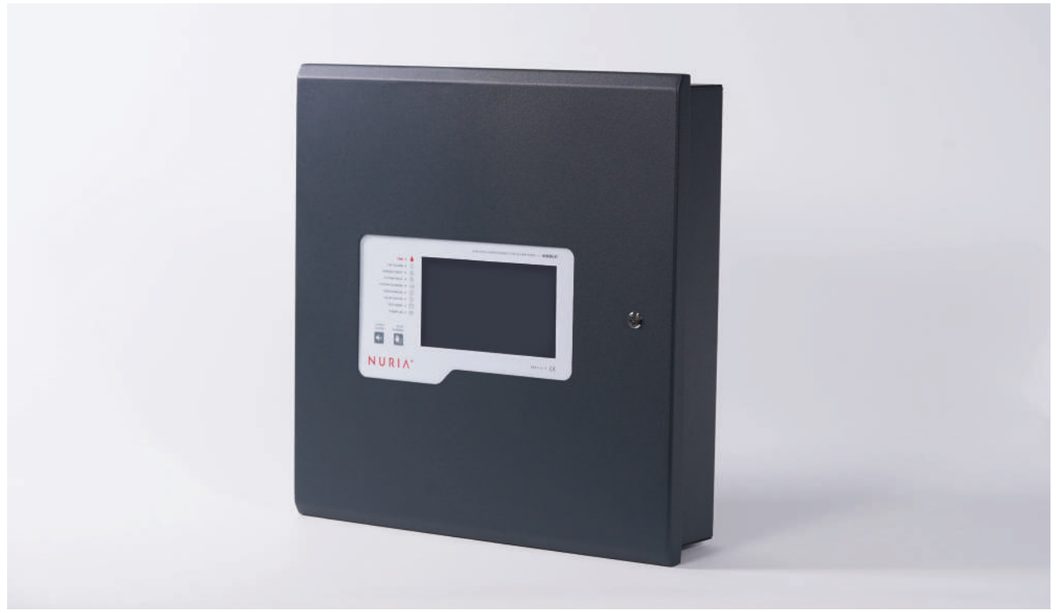
Complementary product
Loop Card – reference: NNR-LOOP
Battery Case (6 Batteries) – reference: NNR-BC

Additional features
Sounder delay; Programmed day / night mode; Alarm counter; Test mode; Polling led; Zones type A and B; Logical event programming; Event registration; Custom logo

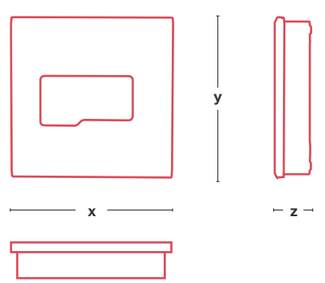
¹ When power is not present, the voltage may vary between 21.6V and 28V, according to the battery voltage.

CERTIFICATIONS

EN54 -2/-4 CE

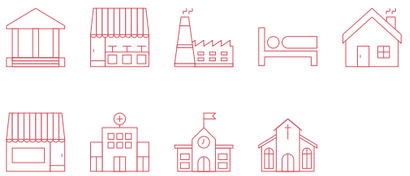


DIMENSIONS



y	x	z
360 mm	255 mm	93 mm

AREAS OF APPLICATION



PRODUCT REFERENCE

NNR

Analogue Adressable System

DETECTORS

NIBBLE incorporates in its product portfolio all of the Apollo brand detectors from the SOTERIA, Discovery, XP95 and XPander (wireless) ranges, that can be selected to develop a wide array of projects.

The analogue addressable range of smoke detectors includes ionization, optical and multisensor types.

SOTERIA® XP95 DISCOVERY®

Soteria Heat Detector (Non-Isolating)

SOTERIA®

The Soteria Heat Detector features two heat sensors located laterally to ensure accurate heat detection in all orientations.

SA5000-400APO

Soteria Optical Smoke Detector (Non-Isolated)

SOTERIA®

The Soteria Optical Smoke Detector uses new optical sensing technology, PureLight®, to detect smoke particles entering the chamber. PureLight marks a new stage in the development of Apollo optical technology and aims to reduce the possibility of false alarms whilst increasing the reliability of detection of a real fire.

SA5000-600APO

Soteria Optical/Heat Multisensor Detector (Non-Isolated)

SOTERIA®

The Soteria Optical/Heat Multisensor Detector uses new optical sensing technology, PureLight®, to detect smoke particles entering the chamber and is fitted with two thermistors for detecting heat. It can be switched to detect smoke, heat or a combination of both offering greater flexibility.

SA5000-700APO

Soteria Dimension Optical Detector

SOTERIA®

The innovative design of the Soteria Dimension Optical Detector differs from standard fire detectors, having no chamber and being flush mounted. A new optical sensing technology is used to detect smoke particles outside the detector housing. A combination of Infra-Red (IR) LEDs and photo-diodes identify smoke particles, detected just below the detector housing and initiates an alarm.

FL5100-600APO

FL6100-600APO

Soteria Dimension Specialist Optical Detector

The Soteria Dimension Specialist Optical Detector is independently certified to DHF TS001 for anti-ligature use in specialist areas. The innovative design of the Soteria Dimension Specialist Optical Detector differs from standard fire detectors, having no chamber and is flush mounted. A combination of Infra-Red (IR) LEDs and photo-diodes identify smoke particles, detected just below the detector housing and initiates an alarm.

55000-400APO

XP95 A2S Heat Detector

The XP95 Heat Detector monitors temperature by using a single thermistor which provides a count output proportional to the external air temperature. The XP95 range features two heat detectors, standard and high temperature. The standard heat detector is classified as an A2S device and will report an alarm at 55°C. The high temperature detector, classified as a CS device, will report an alarm at 90°C.

55000-401APO

XP95 CS Heat Detector

The XP95 Heat Detector monitors temperature by using a single thermistor which provides a count output proportional to the external air temperature. The XP95 range features two heat detectors, standard and high temperature. The standard heat detector is classified as an A2S device and will report an alarm at 55°C. The high temperature detector, classified as a CS device, will report an alarm at 90°C.

55000-600APO

XP95 Optical Smoke Detector

The XP95 Optical Smoke detector uses an internal pulsing infrared LED and a photo-diode at an obtuse angle. In clear air conditions the photo-diode in the XP95 detector receives no light from the LED and produces a corresponding analogue signal. The signal increases when smoke enters the chamber and light is scattered onto the photo-diode. The optical smoke detector has an indicator LED which emits red light when the detector is in alarm.

XP95 Multisensor Detector

The XP95 Multisensor Detector contains an optical smoke sensor and a thermistor temperature sensor whose outputs are combined to give the final analogue value.

55000-885APO

Discovery Carbon Monoxide Detector

Discovery CO fire detectors contain a long-life electro-chemical carbon monoxide sensor which is tolerant of low levels of common vapours and household products. The detection capabilities are enhanced by a rate-sensitive response. The analogue reply from the detector is rate limited to remove nuisance alarms resulting from short-term high levels caused by sources such as pipe smokers or gas flame ignition.

58000-300APO

Discovery CO/Heat Multisensor

The Discovery CO/Heat Multisensor Detector contains a CO detection cell and a thermistor temperature sensor whose outputs are combined to give the final analogue value. The CO/Heat Multisensor detects the presence of carbon monoxide or heat or a combination of both. The signals from the CO sensing cell and the thermistor are independent and represent the amount of CO or the temperature present in the vicinity of the detector.

58000-305APO

Discovery Heat Detector

Discovery heat detectors have a common profile with ionisation and optical smoke detectors but have a low air flow resistance case made of self-extinguishing white polycarbonate. For the European standard version of the detector, the five modes correspond to five “classes” as defined in EN 54-5. The classes in this standard correspond with different response behaviour, each of which is designed to be suitable for a range of application temperatures. All modes incorporate “fixed temperature“ response, which is defined in the standard by the “static response temperature”.

58000-400APO

Discovery Optical Smoke Detector

The Discovery Optical Smoke Detector operates using the light scatter principle and is ideal for applications where slow-burning or smouldering fires pose a potential risk.

58000-600APO

Discovery Multisensor Detector

The Discovery Multisensor Detector consists of optical smoke and thermistor temperature sensors which give both a combined signal as well as a separate heat signal for improved false alarm management.

58000-700APO

Intelligent Duct Smoke Detector

The Intelligent Duct Smoke Detector provides early detection of smoke in the air moving through heating and ventilation (HVAC) ducts in commercial and industrial premises. Its purpose is to prevent the re-circulation of smoke from an area on fire to areas unaffected by the fire when used with a XP95 or Discovery detector

53546-022APO

Intelligent IR² Flame Detector

The Intelligent IR² Flame Detector is designed for use in areas where flaming fires may be expected. The detector has two sensors which respond to different IR wavelengths to discriminate between flames and spurious sources of radiation. Applications include aircraft hangars, coal handling and paper manufacturing plants and woodworking environments.

55000-280APO

Intelligent IR³ Flame Detector

The Intelligent IR3 Flame Detector is designed to protect areas where open flaming fires may be expected. It is sensitive to low frequency, flickering infra-red radiation emitted by flames during combustion.

55000-020APO

Intelligent Base Mounted UV Flame Detector

The Intelligent Base Mounted UV Flame Detector is designed to protect enclosed indoor areas where open fires may be expected. The detector has a fast acting response to flames up to 25m away and is equipped with a single UV sensor with a narrow spectral response in order to discriminate between flames and most spurious sources of radiation.

55000-022APO

Intelligent Base Mounted UV IR² Flame Detector

The Intelligent Base Mounted UV IR² Flame Detector is designed to protect open indoor areas such as aircraft houses, generator rooms and paint works where open flaming fires may be expected. The detector has a UV and dual IR sensors responding to different wavelengths in order to discriminate between flames and spurious sources of radiation.

55000-023APO

Intelligent Reflective Beam Detector 5-50m

The Intelligent Reflective Beam Detector differs from a traditional beam detector in that it is a single unit which houses a transmitter, a receiver and the control electronics. The beam detector is available in two versions: a single reflector model for distances of 5-50m and a more powerful four-reflector unit for distances of 50-100m.

55000-268APO

55000-273APO

Intelligent Reflective Beam Detector 50-100m

The Intelligent Reflective Beam Detector differs from a traditional beam detector in that it is a single unit which houses a transmitter, a receiver and the control electronics. The beam detector is available in two versions: a single reflector model for distances of 5-50m and a more powerful four-reflector unit for distances of 50-100m.

SA7100-100APO

Intelligent Auto-Aligning Beam Detector

The Intelligent Auto-Aligning Beam Detector combines a transmitter/receiver in the same detector head with an automatic alignment motor. The Intelligent Auto-Aligning Beam Detector automatically compensates for environmental effects on the beam signal, keeping the unit in the best possible working order. This is achieved through the combination of software (automatic gain control) and motorised realignment of the beam.

BASES AND ISOLATORS

NIBBLE integrates in its portfolio the entire range of APOLLO Bases, an essential product in fire detection systems, as they allow the connection of devices to the NURIA Analog Addressable Fire Panel.

XPERT 8 Intelligent Mounting Base

SOTERIA

All detectors in the Soteria®, Discovery® and XP95® range fit into the XPERT 8 Intelligent Mounting Base. The base has a wide interior diameter for ease of access to cables and terminals. The 'E-Z Fit' feature allows you to fit the base screws, place the XPERT 8 Intelligent Mounting Base over the screws, slide it into place and tighten the screws.

SA5000-200APO

Soteria Dimension Mounting Box

SOTERIA

Positions for either side or top cable entry are marked on the outside of the Mounting Box to ensure correct cable positioning. An arrow has been placed on the rim to assist in correct orientation of the detector. Placing the Mounting Box in the correct orientation in the installation aperture, it is secured into position by screwing down the self-aligning fixing tabs. The Soteria Dimension Mounting Box is designed to be used with Soteria Dimension Optical Detectors.

FL5000-200APO

Intelligent Mounting Base

XP95 DISCOVERY

All detectors in the Discovery range fit the Intelligent Mounting Base. The Mounting Base is a low insertion force base with stainless steel contacts for the detector terminals. XPERT cards are supplied with all bases.

45681-210APO

XP95 Intelligent Heater Base

XP95 DISCOVERY

The Intelligent Heater Base is designed to be used in cold climates where environmental conditions could result in either icing or condensation affecting the operation of detectors. It is recommended that the heater base be used in conjunction with either a Waterproof Base Cover or Deckhead Mounting Box to minimise moisture ingress

45681-219APO

XP95 Isolating Base

The Isolating Base senses and detects short-circuit faults on Discovery loops and spurs.

45681-284APO

Intelligent Mounting Base (Black)

All detectors in the Discovery range fit the Intelligent Mounting Base. The Mounting Base is a low insertion force base with stainless steel contacts for the detector terminals. XPERT cards are supplied with all bases.

45681-361APO

Intelligent Low Power Relay Base

The XP95A Low Power Relay Base incorporates a low power relay to control field equipment such as automatic door closers.

45681-242APO

Isolator

The Isolator is placed at intervals on the loop and ensures that, in the case of a short circuit, only the section between the isolators will be affected. When the short-circuit is removed, the isolators automatically restore power and data to the isolated section.

55000-720APO

MANUAL CALL POINTS

The manual call point is one of the main elements in addressable analog fire detection systems. NIBBLE integrates in its portfolio all models of APOLLO manual call points, which are known for being easy and quick to install.

SA5900-908APO

Intelligent Manual Call Point (Red)

The Intelligent Manual Call Point has been designed to operate on a loop of intelligent fire detection devices. An alarm is initiated by pressing the resettable element. The manual call point signals to the Control and Indicating Equipment using an interrupt feature within the Apollo Digital Protocol. An alarm status is indicated through the rotation of the resettable element, displaying yellow and black indication bars and a solid red LED. The manual call point can be easily reset from the front using the supplied reset key.

SA5900-903APO

Intelligent Manual Call Point (White)

The Intelligent Manual Call Point has been designed for indoor applications and are available in a variety of colours for different applications such as initiating a hazard rather than a fire alarm. The Intelligent Manual Call Point can be used on XP95, Discovery and CoreProtocol systems.

SA5900-904APO

Intelligent Manual Call Point (Yellow)

The Intelligent Manual Call Point has been designed for indoor applications and are available in a variety of colours for different applications such as initiating a hazard rather than a fire alarm. The Intelligent Manual Call Point can be used on XP95, Discovery and CoreProtocol systems.

SA5900-905APO

Intelligent Manual Call Point (Blue)

The Intelligent Manual Call Point has been designed for indoor applications and are available in a variety of colours for different applications such as initiating a hazard rather than a fire alarm. The Intelligent Manual Call Point can be used on XP95, Discovery and CoreProtocol systems.

Intelligent Manual Call Point (Green)

The Intelligent Manual Call Point has been designed for indoor applications and are available in a variety of colours for different applications such as initiating a hazard rather than a fire alarm. The Intelligent Manual Call Point can be used on XP95, Discovery and CoreProtocol systems.

SA5900-906APO

Apollo Waterproof Manual Call Point with Isolator (Red)

The Apollo Waterproof Manual Call Point has a highly visible alarm indicator which can be seen from up to 10 metres away. The manual call point interrupts the polling cycle for a fast response, when activated. A combined LED indicator and front reset mechanism allows for a simple reset.

58200-951APO

Apollo Discovery Marine Waterproof Manual Call Point with Isolator (Red)

The Discovery Marine Manual Call Points has been designed for use in marine and offshore environments and are available in two versions for indoor and outdoor applications. Both versions are available with and without short circuit isolators. An alarm is initiated by pressing the resettable element.

58200-976MAR

AUDIO VISUALS

Apollo offers a wide range of Audio Visual (AV) signalling devices – sounders, visual indicators, sounder visual indicators and sounder visual indicator bases for use in conjunction with the range of conventional and intelligent APOLLO detectors and interconnected to NURIA Fire Panel.

XP95 DISCOVERY®

Intelligent Open-Area Sounder (Red)

The Intelligent Open-Area Sounder has been designed for use in open areas and can be connected to any Discovery or XP95 system.

55000-001APO

Discovery Open-Area Sounder Visual Indicator (Red)

The Discovery Open-Area Sounder Visual Indicator makes full use of the Discovery protocol and has been designed for use in indoor and open areas. When the fire system is being commissioned a 'Magnetic Wand' can be used to adjust and test each sounder locally.

58000-005APO

Intelligent Open-Area Visual Indicator (Red)

The Intelligent Open-Area Visual Indicator has been developed for use in situations where there is a risk that sounders will not be heard.

55000-009APO

Intelligent Open-Area Visual Indicator (White)

The Intelligent Open-Area Visual Indicator has been developed for use in situations where there is a risk that sounders will not be heard.

55000-010APO

Multi-Tone Weatherproof Open-Area Sounder (Red)

XP95

The Weatherproof Multi-Tone Open-Area Sounder is designed for use in open areas and can be connected to any Discovery or XP95 system.

55000-274APO

Integrated Base Sounder with Isolator

apollo

The Integrated Base Sounder is made up of a base sounder with integral mounting base. It is designed for indoor use.

45681-277APO

Intelligent Sounder Visual Indicator Base with Isolator

apollo

The Sounder Visual Indicator Base is a loop-powered sounder and visual indicator combined with a standard Intelligent Mounting Base. It is used to signal a fire alarm in enclosed areas.

45681-330APO

Intelligent Sounder Visual Indicator Base Slow Whoop with Isolator

apollo

The Sounder Visual Indicator Base is a loop-powered sounder and visual indicator combined with a standard Intelligent Mounting Base. It is used to signal a fire alarm in enclosed areas.

45681-332APO

Loop-Powered Ceiling VAD 15M (Red)

apollo

The Loop Powered VAD is designed for indoor use. The Category C VAD is specifically designed for use on a ceiling and comes in two different coverage classes. The two EN 54-23 coverage classes are C-3-8.5 and C-3-15. These devices are used to supplement sounders in areas which carry the risk that sounders will not be heard.

55000-740APO

Loop-Powered Wall VAD 6m (Red)

apollo

The VAD has been developed as a primary or supplementary alarm device for use in situations where there is a risk that sounders will not be heard. This occurs, for example, where there is a high background noise e.g. in a workshop or a machine room. It might also be required where deaf or hearing impaired persons may be present.

55000-741APO

Loop-Powered Ceiling VAD 15M (Red)

apollo

The Loop Powered VAD is designed for indoor use. The Category C VAD is specifically designed for use on a ceiling and comes in two different coverage classes. The two EN 54-23 coverage classes are C-3-8.5 and C-3-15. These devices are used to supplement sounders in areas which carry the risk that sounders will not be heard.

55000-742APO

Loop-Powered Ceiling VAD 15m (White)

apollo

The VAD has been developed as a primary or supplementary alarm device for use in situations where there is a risk that sounders will not be heard. This occurs, for example, where there is a high background noise e.g. in a workshop or a machine room. It might also be required where deaf or hearing impaired persons may be present.

55000-743APO

55000-744APO

Loop-Powered Wall VAD 6m (White)

The VAD has been developed as a primary or supplementary alarm device for use in situations where there is a risk that sounders will not be heard. This occurs, for example, where there is a high background noise e.g. in a workshop or a machine room. It might also be required where deaf or hearing impaired persons may be present.

55000-745APO

Loop-Powered Ceiling VAD 8.5m (White)

The Loop Powered VAD is designed for indoor use. The Category C VAD is specifically designed for use on a ceiling and comes in two different coverage classes. The two EN 54-23 coverage classes are C-3-8.5 and C-3-15. These devices are used to supplement sounders in areas which carry the risk that sounders will not be heard.

45681-292
45681-293

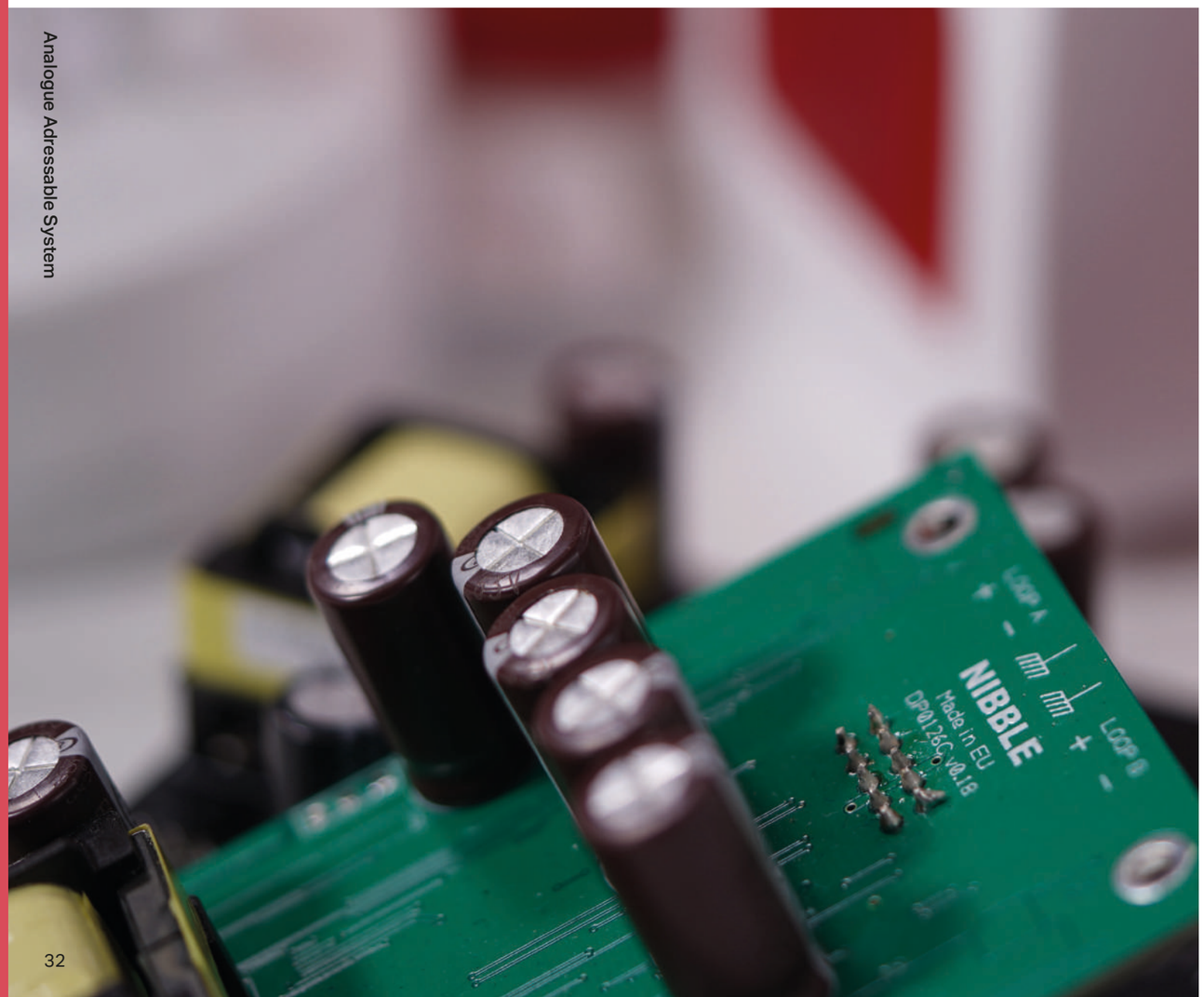
Base Cap (White and Red)

Apollo XP95 45681-292 (branco) e 45681-293 (vermelho) Bloqueio de tampa branca e vermelha para uso com sirene / bases / balizas

ACCESSORIES

NIBBLE integrates in its product portfolio a set of accessories for fire detection systems that allow the good and correct use of the solutions presented in the current catalog of the two companies: NIBBLE and APOLLO.

NIBBLE® apollo



NURIA Battery Case

NIBBLE®

Metal Case with capacity for 6 batteries and includes temperature sensor, straps for fixing batteries and terminals for connection;

NNR-BC

NURIA Loop Card

NIBBLE®

Loop cards that allow to expand NURIA Analogue Addressable fire detection Panel to 2, 3 or 4 loops

NNR-LOOP

Nuria Key

NIBBLE®

Pack of two Keys for replacement

NNR-K

Nuria Power supply

NIBBLE®

Power Supply for NURIA Analogue Addressable fire detection Panel

NNR-PS

Blank XPERT 8 Card (White)

SOTERIA

XPERT 8 Cards are supplied with all XPERT 8 Mounting Bases. Using a coding guide Part No. 39214-481, pips are removed to set the address of theinserted detector.

38532-064

XPERT 7 Card

apollo

Pre-Addressed XPERT Cards are supplied with pips already removed. Saves time and increases accuracy during commissioning.

38531-771

Transparent Hinged Cover for KAC style MCP

XP95

The Transparent Hinged Cover is for use with XP95 and Discovery Manual Call Points and can be fitted to add further protection against accidental operation.

26729-152

Pack of 10 Reset Keys for Apollo Manual Call Point

XP95

Manual Call Point Reset Keys can be used for the reset and removal of all Apollo manufactured Manual Call Points.

44251-176APO

Single Transparent Hinged Cover for Apollo MCP

XP95

The Apollo Transparent Hinged Cover has been designed to fit all Apollo manufactured Manual Call Points to provide protection against accidental operation.

44251-189APO

Conduit Box

apollo

The Conduit Box is a versatile accessory for surface mounting Apollo bases. The box has knockouts to accept PG16 or M20 cable glands, conduit or mini trunking. Self-tapping screws are included to fit the detector base to the conduit box.

45681-204APO

Deckhead Mounting Box

apollo

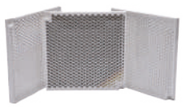
The Deckhead Mounting Box, part no 45681-217, is a device which protects bases, sounder bases and sounder beacon bases from the ingress of water or other liquids. It is screwed to the soffit and accepts a variety of Apollo bases.

45681-217APO

Auto-Aligning Beam Detector Extension Kit 100m

apollo

Extension Kit for the Auto-Aligning Beam Detector.



29600-526

Flame Detector Bracket

XP95

The Flame Detector Bracket is an optional accessory for the Intelligent Flame Detectors. It is a stainless steel mounting bracket adjustable in two axis. Not suitable for Base Mounted Flame Detectors.

29600-203

Flame Detector Weather Shield

XP95

The Flame Detector Weather Shield protects the device from inclement conditions.

29600-206

Base Mounted Flame Detector Bracket

apollo

The Base Mounted Flame Detector Bracket includes a bracket and Deckhead Mounting Box (45681-217APO). Internal mounting base pictured sold separately.

29600-458

Apollo Test Set

apollo

The Apollo Test Set is a portable test unit featuring a touch screen display capable of providing several functions in interrogating and controlling all devices connected to the unit, either individual devices or compete circuits of analogue addressable devices in the Apollo ranges (CoreProtocol, Discovery and XP95). There is a new firmware update available for the Apollo Test Set. For details please refer to the “Apollo Test Set Firmware Update Guide”.

SA7800-870APO

Waterproof Base Cover

apollo

A waterproof cover designed for Discovery, XP95 and Orbis bases.§

45681-519APO

FIRE DETECTION

CONVENTIONAL SYSTEM

NIBBLE has been present in the fire detection market for a few years through its conventional fire detection systems consisting of the FIREWALL fire panel and manual call points, the Thunder outdoor siren and the LED Remote Indicator. Recently, with the agreement established with APOLLO, NIBBLE incorporated in its catalog all products from the ORBIS and Series65 ranges, thus completing its portfolio in regard to conventional fire detection systems.

In conventional systems, the detectors are connected as a circuit or zone, signaling the fire conditions to a fire detection panel.

Conventional systems are aimed at small projects such as cafes, restaurants, hotel rooms, car parks, stores, warehouses, etc.

The FIREWALL Fire Panel, with EN54 certification, stands out in the market due to a set of unique features, as well as the robustness and quality of the material and construction.

FIREWALL apollo

orbis series65 9-33V

Learn more at nibble.pt

Firewall

PANEL

A fire always has a devastating impact, whether at home or at work. The rapid detection of a fire situation is crucial to its combat and extinction, mainly to reduce the human and material damages.

The Fire Alarm Control Panel - FIREWALL - combines the best technology with the elegant design, with a simple and intuitive interface, for the prevention and detection of fires.

The FIREWALL complies with EN-54, offering high safety standards.

MAIN FEATURES

- Models of 2, 4, 8 and 16 zones, up to 32 detectors per zone.
- Smart and automatic zones.
- Compatible with Apollo XP95 / Discovery protocol (up to 126 devices per loop);
- 'Day Mode' function allows to avoid false alarms.
- Powered through a unique battery of 12VDC / 7Ah.
- Auxiliary outputs per zone.
- Up to 2 programmable relays.
- Output supply of 24 VDC up to 500 mA.
- Siren alarm output up to 500 mA.

TECHNICAL SPECIFICATIONS

Power supply
100 240 VAC, 50/60 Hz 45 VA

Battery
1x 12 VDC, 7 Ah or 2x6 VDC, 12 Ah

Standby current
60 mA

Maximum current
1 A

Fuse
Main supply 4 A
24V 1.6 A
Fire Alarm 500 mA

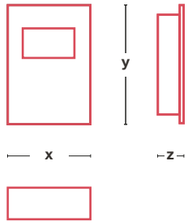
Fire Alarm Output
24 VDC, 500 mA

Relay contacts
250 VAC, 10 A

Auxiliary Outputs
80 VDC, 500 mA (open collector)

Zones
24 V < 65 mA
Up to 32 conventional detectors with termination resistor in parallel of 3300 Ω, 1/4 W. (Callpoint with zener diodes in series 5V1,1/4W

Dimensions



y	x	z
360 mm	255 mm	93 mm

Hole for cables
8 x Ø 20 mm

AREAS OF APPLICATION

CERTIFICATIONS

EN54 -2/-4 CE

PRODUCT REFERENCE

NFW

DETECTORS

NIBBLE integrates in its portfolio APOLLO's ORBIS and Series65 range of detectors, which can be connected to the FIREWALL Conventional Fire Panel.
It is important to highlight the Orbis range of detectors, which is a modern and elegant conventional line of products developed with sophisticated technology that previously could only be found in addressable analog detectors.

Orbis A1R Heat Detector

The Orbis Heat Detector monitors temperature by using a single thermistor which provides a voltage output proportional to the external air temperature.

ORB-HT-11001APO

Orbis BR Heat Detector

The Orbis Heat Detector monitors temperature by using a single thermistor which provides a voltage output proportional to the external air temperature.

ORB-HT-11003APO

Orbis CR Heat Detector

The Orbis Heat Detector monitors temperature by using a single thermistor which provides a voltage output proportional to the external air temperature.

ORB-HT-11005APO

Orbis Optical Smoke Detector

The Orbis Optical Smoke Detector operates on the well-established light scatter principle. The sensing technology used is radically different from previous optical detectors and significantly reduces false alarms.

ORB-OP-12001APO

Orbis Multisensor Detector

ORB-OH-13001APO

Multisensor smoke detectors are recognized as good detectors for general use but are additionally more sensitive to fast burning, flaming fires–including liquid fires–than optical detectors. They can be readily used instead of optical smoke detectors but should be used as the detector of choice for areas where the fire risk is likely to include heat at an early stage in the development of the fire. As with Orbis optical smoke detectors the increased reliability of detection is combined with high immunity to false alarms.

Orbis Duct Detector

53546-023APO

The detector provides early detection of smoke in the air moving through heating and ventilation (HVAC) ducts in commercial and industrial premises. Its purpose is to prevent the re-circulation of smoke from an area on fire to areas unaffected by the fire when used with a Series 65 or Orbis detector. It provides a volt-free changeover relay rated at 30V, 1A.

Series 65 A1R Heat Detector

55000-122APO

The Series 65 Heat Detector monitors temperature by using a dual thermistor network which provides a voltage output proportional to the external air temperature. There are 12 heat detectors in the Series 65 range designed to suit a wide variety of operating conditions.

Series 65 CR Heat Detector

55000-132APO

The Series 65 Heat Detector monitors temperature by using a dual thermistor network which provides a voltage output proportional to the external air temperature. There are 12 heat detectors in the Series 65 range designed to suit a wide variety of operating conditions.

Series 65 Optical Smoke Detector

55000-317APO

The Series 65 Optical Smoke Detector uses light sensing technology to detect a fire. The external detector moulding has an indicator LED which is white in quiescent state but produces a red light in alarm.

Auto-Aligning Beam Detector 8-50m

29650-069

The high-performance Auto-Aligning Beam Detector comprises of a ground level controller, detector head with auto-aligning feature, integral laser for rapid initial alignment and single prism. An additional detector head can be added to the controller.

BASES

APOLLO's ORBIS and Series65 bases are essential in the design of a conventional fire detection system, as they allow connection to the fire panel, in this case, NIBBLE's FIREWALL.

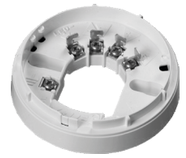
Orbis Heater Base

The Orbis Heater Base is designed to be used in cold climates where environmental conditions could result in either icing or condensation affecting the operation of detectors. It is recommended that the heater base be used in conjunction with either a Waterproof Base Cover or Deckhead Mounting Box to minimise moisture ingress.

ORB-HB-00020-APO

Orbis LX Base

The Orbis LX Base has two slots for fixing screws at a spacing of 51mm and 69mm. Detectors fit into the base one way only and require clockwise rotation without force to be plugged in.



ORB-MB-00012-APO

Orbis TimeSaver Relay Base

The TimeSaver® Relay Base incorporates a single-pole voltage-free changeover contact for switching external equipment. When the detector changes to the alarm state, the relay is energized, causing the contact to change state. The contact will remain in this condition until the detector is reset.

ORB-RB-10004-APO

Series 65 Standard Base

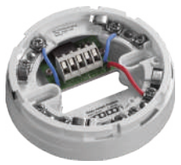
The Series 65 Standard Base has been designed to enable detectors to be fitted without the need of force – particularly useful when fitting to suspended ceilings. All Series 65 bases have a one-way only fit. Detectors can be locked into place by a grub screw using a 1.5mm hexagonal screwdriver.

45681-200APO

Series 65 Standard Relay Base

The Series 65 Standard Relay Base provides one set of volt-free, changeover (form C) contacts that change state when the detector signals an alarm.

45681-245APO



Series 65 12V Relay Base

The Series 65 12V Relay Base is designed for use in both fire and security systems. For fire systems a jumper on the PCB is fitted to a 'latching' position. For security systems the jumper is moved to another position so that the base is 'non-latching'.

45681-508APO

MANUAL CALL POINTS

One of NIBBLE's most successful products is the Firewall-PB manual call point with EN54 certification and a modern and elegant design. To complete the product portfolio, NIBBLE integrates the entire range of APOLLO manual call points.

FIREWALL apollo

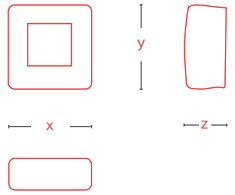
Firewall PB

MANUAL CALL POINT **FIREWALL**

Manual Callpoint FIREWALL-PB offers a simple and intuitive interface. Designed for conventional fire detection systems and EN54 certified, they are available in two models: Type A and Type B. They can also be configured for intrusion or fire systems.

Manual Callpoint combines its versatile application with a simple and elegant design.

DIMENSIONS



x = 100mm
y = 100mm
z = 49mm (surface)
29mm (flush)

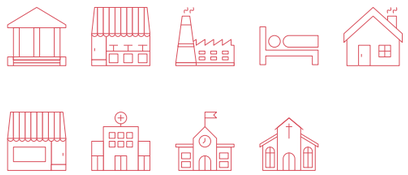
TECHNICAL SPECIFICATIONS

Maximum supply voltage
30 VDC

Alarm Voltage
5.6 V (zener diode)

Alarm Current
1 A (shunt)

AREAS OF APPLICATION



PRODUCT REFERENCE

NPB

Indoor Manual Call Point without LED Red

55100-001APO

Apollo's Conventional Manual Call Points comply with EN 54-11 and are available in both indoor and outdoor variants. Apollo also offers a yellow variant suitable for alternative applications.

Outdoor Manual Call Point without LED Red

55100-003APO

Apollo's Conventional Manual Call Points comply with EN 54-11 and are available in both indoor and outdoor variants. Apollo also offers a yellow variant suitable for alternative applications.

AUDIOVISUAL

NIBBLE has in its product portfolio one of the most audacious and distinctive fire detection sirens on the market. Thunder is an outdoor siren with a design based on the beautiful Portuguese Guitar.

NIBBLE also integrates in its product portfolio APOLLO sirens.

NIBBLE® apollo

Thunder TH-ARC/DOT

AUDIOVISUAL THUNDER

The Outdoor Siren Alarm THUNDER was designed to promote security, both in case of intrusion or fire systems. Its peculiar design was inspired on the Portuguese guitar, and is available in two distinctive models: ARC and DOT.

TECHNICAL SPECIFICATIONS

Main supply 12 VDC to 24 VDC	Standby current 25 mA	Maximum current 300 mA
Maximum loudness 115 dBA	Autonomy 48h	Strobe 0,5 Hz
Dimensios (WxHxD) 325 x 225 x 46 mm	Weight 910g (with battery); 600g (without battery)	

AREAS OF APPLICATION

PRODUCT REFERENCE

NSE-F

Sonos Sounder (Red)

The Sonos Sounder is a conventional sounder which makes use of the TimeSaver base resulting in a faster and more reliable installation.

29600-322

Sonos Sounder Visual Indicator (Red)

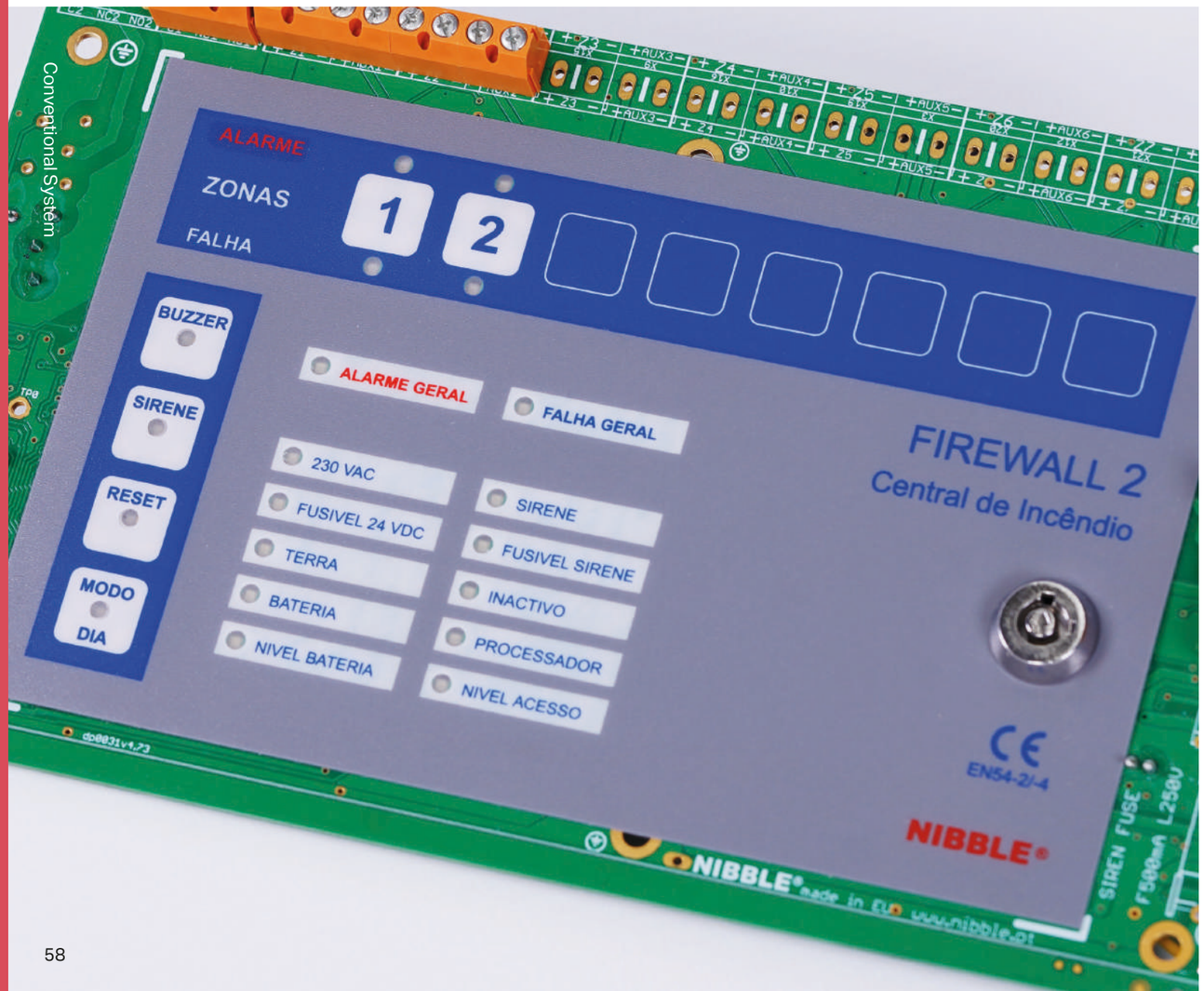
The Sonos Sounder Visual Indicator is a conventional sounder visual indicator which makes use of the TimeSaver base, resulting in a faster and more reliable installation.

29600-323

ACCESSORIES

Accessories are important and complementary elements to conventional fire detection systems. The possibility of replacing certain equipment or increasing the capacity and robustness of a system are some of the advantages when purchasing accessories.

NIBBLE® apollo



Remote fire indicator, 24V

ACCESSORY NIBBLE®

Remote alarm signaler has an LED with high brightness technology and 180 ° visibility. The remote beacon is used when the fire / smoke detector is mounted in a hidden or barely visible place, for example, in closed rooms. It is recommended that the remote beacon be installed at the entrance to these locations, preferably at an elevated point, in order to be visible from a distance.

TECHNICAL SPECIFICATIONS

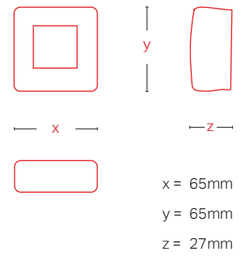
Maximum current
12 VDC até 24 VDC

Brightness
25 mA

Alarm current
300 mA

Dimensions
65 x 65 x 27 mm

DIMENSIONS



x = 65mm
y = 65mm
z = 27mm

AREAS OF APPLICATION

PRODUCT REFERENCE

NRI1

Firewall Power supply

FIREWALL

Power Supply for Firewall Conventional fire detection Panel

NFW-PS

Firewall Keys

FIREWALL

Pack of two Keys for replacement

NFW-K

Replacement PCB

FIREWALL

Firewall Fire detection panel keyboard for replacement if necessary

NFW-LCD

Conduit Box

apollo

The Conduit Box is a versatile accessory for surface mounting Apollo bases. The box has knockouts to accept PG16 or M20 cable glands, conduit or mini trunking. Self-tapping screws are included to fit the detector base to the conduit box.

45681-204APO

Deckhead Mounting Box

apollo

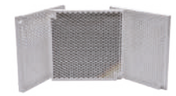
Apollo's Conventional Manual Call Points comply with EN 54-11 and are available in both indoor and outdoor variants. Apollo also offers a yellow variant suitable for alternative applications.

45681-217APO

Auto-Aligning Beam Detector Extension Kit 100m

apollo

Extension Kit for the Auto-Aligning Beam Detector.



29600-526

Flame Detector Bracket

apollo

The Flame Detector Bracket is an optional accessory for the Intelligent Flame Detectors. It is a stainless steel mounting bracket adjustable in two axis. Not suitable for Base Mounted Flame Detectors.

29600-203

Flame Detector Weather Shield

apollo

The Flame Detector Weather Shield protects the device from inclement conditions.

29600-206

29600-458

Base Mounted Flame Detector Bracket

The Base Mounted Flame Detector Bracket includes a bracket and Deckhead Mounting Box. Internal mounting base pictured sold separately.

Conventional System

WIRELESS SYSTEM

XPander is Apollo's wireless intelligent fire detector range, designed for use in buildings and structures where electrical wiring installations are restricted or difficult. Sometimes this is due to the architecturally sensitive nature of buildings (such as listed buildings and stately homes that were not designed for the modern age), but there are other instances where the design of modern buildings does not lend itself to cable installations.

XPander Optical Detector

XPander optical detectors are recommended for use as general purpose smoke detectors for early warning of fire in most installations. XPander optical detectors operate on the well established light scatter principle. The optical design of the XPander optical detector allows it to respond to a wide spectrum of fires. The detector is calibrated so that XPander is highly reliable in detecting fires but has enhanced immunity to false alarms.

XPA-OP-12034-APO

XPander CS Heat Detector

There are two heat detectors in the XPander range, designed to suit a wide variety of operating conditions. A Static Heat Detector (CS) which responds only when a fixed temperature has been reached and a Rate-of-Rise Detector (A1R) which has a fixed upper limit, but in addition, measures the rate of increase in temperature.

XPA-HT-11171-APO

XPander A1R Heat Detector

There are two heat detectors in the XPander range, designed to suit a wide variety of operating conditions. A Static Heat Detector (CS) which responds only when a fixed temperature has been reached and a Rate-of-Rise Detector (A1R) which has a fixed upper limit, but in addition, measures the rate of increase in temperature.

XPA-HT-11170-APO

XPander Sounder Visual Indicator (Red) and Optical Smoke Detector

The XPander Combined Sounder Visual Indicator and Detector is wireless and designed to provide a one point detection and notification. The integrated Optical Smoke Detector works on the light scatter principle and is ideal for applications where slow-burning or smouldering fires are likely.

XPA-CB-14020-APO

XPander Sounder Visual Indicator (Red) and A1R Heat Detector

The XPander Combined Sounder Visual Indicator and Detector is wireless and designed to provide a one point detection and notification. The integrated Rate-of-Rise Detector (A1R) has a fixed upper limit temperature but, in addition, measures the rate of increase in temperature.

XPA-CB-14021-APO

XPander Sounder Visual Indicator (Red) and CS Heat Detector

The XPander Combined Sounder Visual Indicator and Detector is wireless and designed to provide a one point detection and notification. The integrated Static Heat Detector (CS) responds only when a fixed temperature has been reached.

XPA-CB-14022-APO

XPander Sounder Visual Indicator (Clear) and Optical Smoke Detector

The XPander Combined Sounder Visual Indicator and Detector is wireless and designed to provide a one point detection and notification. The integrated Optical Smoke Detector works on the light scatter principle and is ideal for applications where slow-burning or smouldering fires are likely.

XPA-CB-14024-APO

XPander Manual Call Point

The XPander Manual Call Point is compliant with EN 54-11. It is wireless and is powered by two independent packs of three AA alkaline batteries with a typical five year life.

XPA-MC-14006-APO

XPander Sounder and Mounting Base (Red)

The XPander Sounder and Sounder Base is wireless and designed to be used with XPander detectors and manual call points.

XPA-CB-14001-APO

XPander Sounder Visual Indicator (Red) and Mounting Base (Red)

The XPander Sounder and Sounder Base is wireless and designed to be used with XPander detectors and manual call points.

XPA-CB-14003-APO

XPander Input/Output Single Unit

The XPander Input/Output Unit is a radio based interface and offers two monitored input circuits and two relay outputs. It can be used for controlling fire doors, fire dampers, smoke vents and other fire engineering applications.

XPA-IN-14011-APO

XPander Input/Output Single Unit

The XPander Input/Output Unit is a radio based interface and offers two monitored input circuits and two relay outputs. It can be used for controlling fire doors, fire dampers, smoke vents and other fire engineering applications.

XPA-IN-14012-APO

Xpander Diversity Loop Interface Unit

XPANDER

The XPander Diversity Loop Interface Unit can monitor up to 31 XPander devices and report each device's status to an intelligent fire control panel.

XPA-IN-14050-APO

XPander Surveyor Kit

XPANDER

The XPander Diversity Survey kit is used at the site survey stage to ascertain if a site is suitable for an XPander installation. A site survey must be carried out before XPander can be installed. The Diversity Survey Kit is compliant to BS 5839-1.

XPA-TE-14075-APO

MARINE

Apollo offers both analogue addressable and conventional ranges of smoke and heat detectors which are approved for use in the marine environment. These detectors operate in the same way and carry the same approvals as standards detectors, but are subject to additional approvals tests, specific to the marine environment.

Marine Intelligent Base Mounted UV Flame Detector

The Marine Intelligent Base Mounted UV Flame Detector is designed to protect enclosed indoor areas where open fires may be expected. The detector has a fast acting response to flames up to 25m away and is equipped with a single UV sensor with a narrow spectral response in order to discriminate between flames and most spurious sources of radiation.

55000-027MAR

Marine Intelligent Base Mounted UV IR² Flame Detector

The Marine Intelligent Base Mounted UV Dual IR Flame Detector is designed to protect open indoor areas where open flaming fires may be expected. The detector has a UV and dual IR sensors responding to different wavelengths in order to discriminate between flames and spurious sources of radiation.

55000-028MAR

Marine Intelligent Base Mounted IR³ Flame Detector

The Intelligent Base Mounted IR3 Flame Detector is designed to protect all indoor areas, even in dirty or smoky conditions where open flaming fires may be expected. The detector has three IR sensors that respond to different IR wavelengths in order to discriminate between flames and spurious sources of radiation.

55000-029MAR

Discovery Marine Mounting Base

All detectors in the Discovery Marine range are for use with the Marine Mounting Base. The mounting base is a low insertion force base with stainless steel contacts for the detector terminals. XPERT 7 Cards are supplied with all Discovery bases.

45681-210MAR

Discovery Marine Mounting Base

All detectors in the Discovery Marine range are for use with the Marine Mounting Base. The mounting base is a low insertion force base with stainless steel contacts for the detector terminals. XPERT 7 Cards are supplied with all Discovery bases.

45681-210MAR

Discovery Marine Isolator Base

The Discovery Marine Isolator Base is unique and designed to only accept the marine isolator.

45681-211MAR

Marine Isolating Base

The Isolating Base senses and isolates short circuit faults on XP95 and Discovery loops and spurs.

45681-286MAR

Orbis Marine A1R Heat Detector

The Orbis Marine Heat Detector uses a single thermistor to sense the air temperature around the detector. There are twelve heat detectors in the Orbis Marine range designed to suit a wide variety of operating conditions.

ORB-HT-41001MAR

Orbis Marine BR Heat Detector

The Orbis Marine Heat Detector uses a single thermistor to sense the air temperature around the detector. There are twelve heat detectors in the Orbis Marine range designed to suit a wide variety of operating conditions.

ORB-HT-41003MAR

Orbis Marine Multisensor Detector

The Orbis Heat Detector monitors temperature by using a single thermistor which provides a voltage output proportional to the external air temperature.

ORB-OH-43001-MAR

Orbis Marine Optical Smoke Detector with Flashing LED

The Orbis Marine Optical Smoke Detector operates on the well-established light scatter principle. However, the sensing technology is radically different in design from previous optical detectors and significantly reduces false alarms.

ORB-OP-42001-MAR

Orbis Marine TimeSaver Base

The Orbis Marine TimeSaver® Base provides installers with an open working area with fixing holes shaped to allow a simple mounting procedure.

ORB-MB-00001-MAR

55000-026MAR

Marine Series 65 Base Mounted UV Flame Detector

The Marine Series 65 Base Mounted UV Flame Detector is designed to protect enclosed indoor areas where open flaming fires may be expected. The detector has a fast acting response to flames up to 25m away and is equipped with a single UV sensor with a narrow spectral response in order to discriminate between flames and most spurious sources of radiation.

55100-021MAR

Conventional Marine Manual Call Point (Red)

The Conventional Marine Manual Call Point has been designed to operate on conventional marine fire detection systems. The Manual Call Point has an easily resettable element rather than a break glass. This call point is supplied with a backbox for surface mounting. It also features a unique 'Plug and Play' installation concept designed specifically to reduce installation time.

55100-022MAR

Conventional Marine Waterproof Manual Call Point (Red)

The Conventional Marine Waterproof Manual Call Point Red is a 'Type A' call point suitable for outdoor use.

INTERFACES

Apollo manufactures a comprehensive range of interfaces for systems which enable fire protection solutions to be engineered simply and effectively without the need for custom-designed equipment.
There are a variety of interfaces available to suit a number of individual applications.

orbis® XP95

Intelligent DIN-Rail Switch Monitor

The Intelligent DIN-Rail Switch Monitor is designed to monitor the state of one or more single pole, volt-free contacts connected on a single pair of cables and to report the status. It has a selectable status reporting delay making it suitable for monitoring flow switches.

SA4700-300APO

Intelligent DIN-Rail Input/Output Unit

The Intelligent DIN-Rail Input/Output Unit provides supervision of one or more normally open volt free contacts connected to a single pair of cables and a set of changeover relay output contacts. Compatible with XP95, Discovery and CoreProtocol digital communication protocols.

SA4700-302APO

Intelligent Switch Monitor Unit

The Intelligent Switch Monitor is designed to monitor the state of one or more single pole, volt-free contacts connected on a single pair of cables to report the status. It has a selectable status reporting delay making it suitable for monitoring flow switches.

SA4700-100APO

Intelligent Input/Output Unit

The Intelligent Input/Output Unit provides supervision of one or more normally open contacts connected to a single pair of cables and a set of changeover relay output contacts.

SA4700-102APO

SA4700-103APO

Intelligent Mains Switching Input/ Output Unit

The Intelligent Mains Switching Input/Output Unit provides a single line tolerant circuit (CoreProtocol only) containing one or more normally open contacts connected to a single pair of cables. It also provides a voltage free change over relay output capable of switching mains.

SA4700-104APO

Intelligent Twin Input/Output Unit

The Intelligent Twin Input/Output Unit provides the function of two Input/Output Units within one enclosure. The two units are electrically independent of each other. There is a DIL switch on each unit to set the address. Both input/output units in the enclosure provide supervision of one or more normally open volt free contacts connected to a single pair of cables and a set of changeover relay output contacts.

SA6700-100APO

Intelligent Twin Switch Monitor

The Intelligent Twin Switch Monitor provides the function of two Switch Monitor units within one enclosure. The two units are electrically independent of each other. There is a DIL switch on each unit to set the address. Both Switch Monitor units in the enclosure are designed to monitor the state of one or more single pole, volt-free contacts connected on a single pair of cables to report the status. It has a selectable status reporting delay making it suitable for monitoring flow switches.

29600-378

Conventional Galvanic Barrier

The Glavanic barrier is available in the XP95 IS range and the Orbis IS range. It can be installed in safe areas and ensures system integrity.

55000-182APO

DIN-Rail Sounder Controller (5 Amperes)

The DIN-Rail Sounder Controller (5 Amperes) is used to control the operation of a zone of externally powered sounders and report their status to the control panel.

55000-760APO

Mini Switch Monitor

The Mini Switch Monitor is an interface within an entirely new housing. This allows the unit to be fitted onto a standard 35mm DIN-Rail (using a twist-click motion) or mounted within an enclosure, for example a manual call point. It is designed to monitor the state of one or more single pole, volt-free contacts connected on a single pair of cables and to report the status to Apollo compatible analogue addressable control equipment.

55000-797APO

DIN-Rail Mains Input/Output Unit

The DIN-Rail Mains Input/Output Unit provides a mains-rated voltage-free, single pole change-over relay output and a monitored switch input. The unit supervises one or more normally-open switches connected to a single pair of cables.

55000-812APO

DIN-Rail Zone Monitor with Isolator

The DIN-Rail Zone Monitor with Isolator powers and controls a zone of up to 20 Apollo Series 65 or Orbis fire detectors in a Discovery or XP95 loop.

Zone Monitor

XP95

The Zone Monitor powers and controls the operation of a zone of up to 20 Apollo Series 65 or Orbis Fire Detectors from a Discovery or XP95 loop.

55000-845APO

Sounder Control Unit

XP95

The Sounder Control Unit is used to control the operation of a zone of conventional sounders and report their status to the control panel.

55000-852APO

INTRINSICALLY SAFE

Apollo o□ers both analogue addressable and conventional smoke and heat detector ranges, designed to be intrinsically safe as they meet the requirements of the ATEX directive.

There are many places where an explosive mixture of air and gas or vapour may be present continuously, intermittently or as a result of an accident. These are defined as hazardous areas by BS EN 60079, which is the code of practice for installation and maintenance of electrical apparatus in potentially explosive atmospheres.

Orbis I.S. A1R Heat Detector

The Orbis IS Heat Detector monitors temperature by using a single thermistor network which provides a voltage output proportional to the external air temperature. The Orbis IS range incorporates seven heat detector classes to suit a wide range of operating conditions.

ORB-HT-51145APO

Orbis I.S. A1R Heat Detector

The Orbis IS Heat Detector monitors temperature by using a single thermistor network which provides a voltage output proportional to the external air temperature. The Orbis IS range incorporates seven heat detector classes to suit a wide range of operating conditions.

ORB-HT-51153APO

Orbis I.S. Multisensor Detector

The Orbis IS Multisensor Smoke Detector benefits from the same false alarm technology as the Optical Smoke Detector with the addition of a heat sensing element.

ORB-OH-53027-APO

Orbis I.S. Optical Smoke Detector

The Orbis IS Optical Smoke Detector works using the light scatter principle and is ideal for applications where slow-burning or smouldering fires are likely.

ORB-OP-52027-APO

XP95 I.S. Optical Smoke Detector

XP95

Optical smoke detectors incorporate a pulsing LED located in a labyrinth within the housing of the detector. The labyrinth is designed to exclude light from any external source. At an angle to the LED is a photo-diode which does not receive light directly from the LED. The detector transmits a clear air signal to the control panel. When smoke enters the labyrinth, light is scattered onto the photo-diode and the signal to the panel increases.

55000-640APO

XP95 I.S. Heat Detector

XP95

The XP95 IS Heat Detector is distinguishable from XP95 IS smoke detectors by its low air-flow resistance case which allows good contact between the sensing thermistor and the surrounding air. The device monitors temperature by using a single thermistor network which provides a voltage output proportional to the external air temperature.

55000-440APO

Orbis I.S. Timesaver Base

orbis

The Orbis IS Optical Smoke Detector works using the light scatter principle and is ideal for applications where slow-burning or smouldering fires are likely.

ORB-MB-50018APO

XP95 I.S. Mounting Base

XP95

The XP95 IS Mounting Base has been designed to accept only IS products. This ensures that standard detectors cannot inadvertently be fitted into an intrinsically safe system. XPERT cards are supplied with all bases. The XP95 IS Base for the intrinsically safe range is not identical with that for the standard range. This ensures that standard detectors cannot inadvertently be fitted to an intrinsically safe system.

45681-215APO

Conventional I.S. Manual Call Point (Red)

apollo

The Conventional IS Manual Call Point has been designed to operate on conventional intrinsically safe fire detection systems. Designed specifically for use in atmospheres in which explosive mixtures are or may be present, certain design considerations must be observed. The Manual Call Point is available in two versions, indoor and outdoor in either red or yellow.

55100-031APO

XP95 I.S. Manual Call Point (Red)

XP95

The XP95 I.S. Manual Call Point has been designed to operate on a loop of intelligent fire detection devices and when activated interrupts the polling cycle for a very fast response. When activated, the intrinsically safe call point not only interrupts the polling cycle to indicate to the control panel that it has been operated, but also reports its address. Thus an alarm and its location can be reported in less than 0.2 seconds.

55200-940APO

XP95 I.S. Galvanic Barrier

XP95

The XP95 IS Galvanic Barrier is installed in the safe area and ensures system integrity.

29600-098

Protocol Translator (Single Channel)

XP95

The Protocol Translator are installed in the safe area ensuring integrity of communication between control equipment and field devices and safety within the limits of BASEEFA approvals.

55000-855APO

FIRE DETECTION

UL/FM PRODUCTS

NIBBLE incorporates the complete APOLLO line with UL, ULC and FM certification. These products have been carefully developed to meet the needs of the markets that favor these certifications, thus allowing NIBBLE to address a greater number of projects anywhere in the world.

The main APOLLO product ranges with UL, ULC and FM Certification are composed of Detectors, Bases and Isolators, Manual Call Points and Audiovisual solutions. The Discovery and XP95 ranges refer to addressable analog detection systems and, as such, must be considered with the NURIA Addressable Analog Fire Panel in order to design a fire detection system. In conventional systems Series65 will be the most suitable, in connection with the FIREWALL Fire Panel.

series65 9-33V

XP95

DISCOVERY®

Intrinsically Safe

Fire Detection

Learn more at nibble.pt

DETECTORS

XP95 DISCOVERY® series65 9-33V®

XP95A Ionisation Smoke Detector

XP95

The XP95A Ionization Detector uses a low activity radioactive foil to detect fires by irradiating the air in the smoke chambers and causing a current flow. If smoke enters the chamber, the current flow is reduced leading to an alarm.

55000-550APO

XP95A Photoelectric Smoke Detector

XP95

The XP95A Photo-Electric Smoke Detector works on the light-scatter principle and is ideal for applications where slow-burning or smoldering fi res are likely.

55000-650APO

XP95A Multisensor Detector

XP95

The XP95A Multisensor contains a photo-electric smoke sensor and a thermistor (temperature sensor) whose outputs are combined to give the final analog value.

55000-886APO

XP95A Heat Detector

XP95

The XP95A Heat Detector monitors temperature by using a single thermistor which provides a voltage output proportional to the external air temperature. It is classified as an ordinary detector by UL.

55000-450APO

Discovery UL Ionisation Smoke Detector

58000-550APO

The Discovery UL Ionization Smoke Detector uses a low activity radioactive foil to detect fires by irradiating the air in the smoke chambers and causing a current flow. If smoke enters the chamber, the current flow is reduced leading to an alarm.

Discovery UL Photoelectric Smoke Detector

58000-650APO

The Discovery UL Photo-Electric Smoke Detector works using the light scatter principle and is ideal for applications where slow-burning or smoldering fires are likely.

Discovery UL Multisensor Detector

58000-750APO

The Discovery UL Multisensor Detector consists of optical smoke and thermistor temperature sensors whose outputs are combined to give the final analog value. As a result, the Multisensor is useful over a wide range of applications and is highly immune to false alarms.

Discovery UL Heat Detector

58000-450APO

The Discovery UL Heat Detector is distinguishable by the low airfl ow resistant case and uses a single thermistor to sense the air temperature around the detector.

Series 65A 135˚F Heat Detector with Flashing LED and Magnetic Test Switch

55000-138APO

The Series 65A Heat Detector monitors temperature by using a dual thermistor network which provides a voltage output proportional to the external air temperature. There are nine heat detectors in the Series 65A range designed to suit a wide variety of operating conditions.

Series 65A 135˚F Heat Detector with Flashing LED

55000-139APO

The Series 65A Heat Detector monitors temperature by using a dual thermistor network which provides a voltage output proportional to the external air temperature. There are nine heat detectors in the Series 65A range designed to suit a wide variety of operating conditions.

Series 65A 135˚F Heat Detector Standard

55000-140USA

The Series 65A Heat Detector monitors temperature by using a dual thermistor network which provides a voltage output proportional to the external air temperature. There are nine heat detectors in the Series 65A range designed to suit a wide variety of operating conditions.

Series 65A 170˚F Heat Detector with Flashing LED and Magnetic Test Switch

55000-141APO

The Series 65A Heat Detector monitors temperature by using a dual thermistor network which provides a voltage output proportional to the external air temperature. There are nine heat detectors in the Series 65A range designed to suit a wide variety of operating conditions.

55000-142USA

Series 65A 170˚F Heat Detector with Flashing LED

The Series 65A Heat Detector monitors temperature by using a dual thermistor network which provides a voltage output proportional to the external air temperature. There are nine heat detectors in the Series 65A range designed to suit a wide variety of operating conditions.

55000-143USA

Series 65A 170˚F Heat Detector Standard

The Series 65A Heat Detector monitors temperature by using a dual thermistor network which provides a voltage output proportional to the external air temperature. There are nine heat detectors in the Series 65A range designed to suit a wide variety of operating conditions.

55000-145APO

Series 65A 200˚F Heat Detector with Flashing LED

The Series 65A Heat Detector monitors temperature by using a dual thermistor network which provides a voltage output proportional to the external air temperature. There are nine heat detectors in the Series 65A range designed to suit a wide variety of operating conditions.

55000-146APO

Series 65A 200˚F Heat Detector Standard

The Series 65A Heat Detector monitors temperature by using a dual thermistor network which provides a voltage output proportional to the external air temperature. There are nine heat detectors in the Series 65A range designed to suit a wide variety of operating conditions.

55000-225USA

Series 65A Ionisation Smoke Detector with Flashing LED and Magnetic Test Switch

The Series 65A Ionisation Smoke Detector uses a low activity radioactive foil to detect fires by irradiating the air in the smoke chambers and causing a current flow. If smoke enters the chamber, the current flow is reduced leading to an alarm.

55000-226USA

Series 65A Ionisation Smoke Detector with Flashing LED

The Series 65A Ionisation Smoke Detector uses a low activity radioactive foil to detect fires by irradiating the air in the smoke chambers and causing a current flow. If smoke enters the chamber, the current flow is reduced leading to an alarm.

55000-227USA

Series 65A Ionization Smoke Detector

The Series 65A Ionisation Smoke Detector uses a low activity radioactive foil to detect fires by irradiating the air in the smoke chambers and causing a current flow. If smoke enters the chamber, the current flow is reduced leading to an alarm.

55000-325USA

Series 65A Photoelectric Smoke Detector with Flashing LED and Magnetic Test Switch

The Series 65A Photo-Electric Smoke Detector incorporates a pulsing LED located within the housing of the detector. The detector housing is identical to that of the Ionisation Detector but has an indicator LED which is clear in quiescent state but produces red light in alarm.

55000-326USA

Series 65A Photoelectric Smoke Detector with Flashing LED

The Series 65A Photo-Electric Smoke Detector incorporates a pulsing LED located within the housing of the detector. The detector housing is identical to that of the Ionisation Detector but has an indicator LED which is clear in quiescent state but produces red light in alarm.

55000-327USA

Series 65A Photoelectric Smoke Detector

The Series 65A Photo-Electric Smoke Detector incorporates a pulsing LED located within the housing of the detector. The detector housing is identical to that of the Ionisation Detector but has an indicator LED which is clear in quiescent state but produces red light in alarm.

55000-328APO

Series 65A Photoelectric Smoke Detector (High Sensitivity)

The Series 65A Photo-Electric Smoke Detector incorporates a pulsing LED located within the housing of the detector. The detector housing is identical to that of the Ionisation Detector but has an indicator LED which is clear in quiescent state but produces red light in alarm.

BASES AND ISOLATORS

XP95A Mounting Base

XP95

All detectors in the XP95A product line fi t the XP95A Mounting Base which is a low insertion force base with stainless steel contacts for the detector terminals. XPERT Cards are supplied with all bases.

45681-210UL

Isolator Base

XP95

The Isolator Base is unique and designed to only accept the Isolator 55000-720.

45681-211USA

XP95A 6″ Mounting Base

XP95

All detectors in the XP95A product line fit the XP95A Mounting Base which is a low insertion force base with stainless steel contacts for the detector terminals. XPERT Cards are supplied with all bases.

45681-225APO

E-Z Fit Base

XP95

The E-Z Fit Base is a low profile 6″ mounting base for XP95A detectors.

5681-250USA

Isolating Base

XP95

The Isolating Base senses and detects short-circuit faults on Discovery loops and spurs.

45681-284UL

XP95A Sounder Visual Indicator Base (Red LED)

XP95

The XP95A Sounder Beacon Base is a loop-powered sounder and beacon combined with a standard Intelligent Mounting Base. It is used to signal a fire alarm in enclosed areas. The Sounder Beacon Base can be used either with a detector fitted or with a cap for operation as a stand-alone alarm device.

45681-526USA

XP95A Isolator

XP95

The XP95A Isolator is placed at intervals on the loop and ensures that, in the case of a short circuit, only the section between the isolators will be affected. When the short circuit is removed, the isolators automatically restore power and data to the isolated section.

55000-750USA

Discovery UL Sounder Visual Indicator Base (Red LED)

DISCOVERY®

The Discovery UL Sounder Visual Indicator Base combines a sounder with a visual indicator and detector base in one unit

45681-524USA

Series 65A Mounting Base

45681-200UL

The Series 65 Standard Base has been designed to enable detectors to be fitted without the need of force particularly useful when fitting to suspended ceilings. All Series 65 bases have a 'one way only' fit. Detectors can be locked into place by a grub screw using a 1.5mm hexagonal screwdriver.

Series 65A Mounting Base

45681-200USA

The Series 65 Standard Base has been designed to enable detectors to be fitted without the need of force particularly useful when fitting to suspended ceilings. All Series 65 bases have a 'one way only' fit. Detectors can be locked into place by a grub screw using a 1.5mm hexagonal screwdriver.

Series 65A 6" Standard Base

45681-220APO

The Series 65A Standard Base has been designed to enable detectors to be fitted without the need of force -particularly useful when fitting to suspended ceilings. All Series 65A bases have a 'one way only' fit.

Series 65A 6" Low Profile Base

45681-232APO

A low profile mounting base for Series 65A detectors.

Series 65A 6" E-Z Fit Base

45681-251USA

The Series 65A Standard Relay Base provides one set of volt-free, changeover (form C) contacts that change state when the detector signals an alarm.

Series 65A 4" Standard Relay Base

45681-255USA

The Series 65A Standard Relay Base provides one set of volt-free, changeover (form C) contacts that change state when the detector signals an alarm.

Series 65A 4" Auxiliary Relay Base

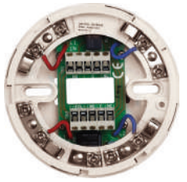
45681-256USA

The Series 65A Auxiliary Relay Base provides two sets of volt-free changeover contacts to facilitate the switching of a remote LED or other auxiliary device.

Series 65A 4" 24v End-of-Line Relay Base

45681-258USA

The Series 65A End-of-Line (EOL) Relay Base is intended for use with 4-wire circuits and feature two sets of changeover contacts and a power supervision relay.



MANUAL CALL POINTS

XP95 DISCOVERY®

Dual Action Addressable Manual Pull Station

XP95

The Addressable Polycarbonate Pull Station is dual-action and features translucent plastic at the center, allowing visibility of an internal LED that indicates alarm condition and polling status. The unit is addressable using a DIP switch protected within the pull station. The Polycarbonate Pull Station may be flush mounted on a single gang work box or use an optional back cover.

56000-005USA

Dual Action Addressable Manual Pull Station Back Box

XP95

The Addressable Polycarbonate Pull Station is dual-action and features translucent plastic at the center, allowing visibility of an internal LED that indicates alarm condition and polling status. The unit is addressable using a DIP switch protected within the pull station. The Polycarbonate Pull Station may be flush mounted on a single gang work box or use an optional back cover.

56000-006USA

AUDIOVISUAL

XP95 DISCOVERY®

XP95A Open Area Sounder (Red)

XP95

The XP95A Open-Area Sounder has been designed for use in open areas and can be connected to any Discovery UL or XP95A system.

55000-041USA

Discovery UL Open-Area Sounder Visual Indicator (Red)

XP95

The Discovery UL Open-Area Sounder Beacon makes full use of the Discovery protocol and has been designed for use in indoor, outdoor and open-areas. When the fire system is being commissioned a Magnetic Wand can be used to adjust and test each sounder locally.

58000-011USA

SECURITY

GSM COMMUNICATORS

The GSM / GPRS / IP Communicators, equipped with the latest mobile communications technology, offer timely monitoring and control of what happens in your home or business, remotely, via your mobile phone, in a secure and personal way.

MAIN FEATURES

- Wide range of models
- GSM Quadband
- PIN code protected access
- Telephone line backup
- GSM simulators
- Transparent mode for alarm panels
- Home automation functions
- Simple and intuitive assembly interface
- Remote device operation
- Integration of the security system with GSM communicators

GC-36

COMUNICADOR GSM **GC**

The GC-36 Communicator is one of the most sophisticated and innovative communicators on the market. With an excellent quality-price ratio and an attractive and elegant design, the GC-36 allows a wide range of configurable actions on the equipment itself or remotely, via mobile phone.
The GC-36 communicator allows the configuration of text messages and personalized audio messages for each state change in the inputs and associate each input status with certain outputs, in order to provide automatic functions such as turning on a water pump when a flood is detected, or activating a siren when an intrusion is detected.
There is also the functionality of activating outputs through calls, allowing, in a free and easy way, to trigger actions with a simple telephone call (for example, for opening garage gates).

TECHNICAL DETAILS

- 2x16 LCD local interface and capacitive keyboard
- 6 bidirectional inputs / outputs
- Micro-USB
- 150 users
- Text message and voice alerts for each input
- Periodic test calls
- SIM card balance indication
- Code to disarm
- Level 2 and 3 access codes
- Output action through inputs
- Output action through free calls
- Tamper detection
- Power failure detection
- Internal antenna (external option not included)
- 9V Ni-MH backup battery (not included)

TECHNICAL SPECIFICATIONS

Power supply
12 VDC to 32 VDC

Weight
220 g (with battery);
165 g (without battery)

Standby current
30 mA @ 15VDC

Dimensions
116.5 x 104.5 x 32 mm

Communication current
100mA @ 15VDC

GC ANTENA

Antena for GC-36

Antena reference	GC-36 reference
ANT1	NGC17

SECURITY

AUDIO VISUALS

NIBBLE has in its product portfolio one of the most audacious and distinctive fire detection sirens on the market. Thunder is an outdoor siren with a design based on the beautiful Portuguese Guitar.

Thunder Siren

OUTDOOR SIREN **THUNDER**

The warning signs have always been used to trigger reactions that can save lives and private property. The Outdoor Sirens Alarm THUNDER were designed to act at security level, producing audible signalization either for intrusion or re systems. In compliance with EN54-3 and EN50131 standards, THUNDER Sirens provide an audible and effective alarm to protect your home or business. Its peculiar design was inspired in the Portuguese guitar, presenting in two distinctive models: ARC and DOT.

TECHNICAL SPECIFICATIONS

Main supply 12 VDC to 24 VDC	Standby current 25 mA	Maximum current 300 mA
Maximum loudness 115 dBA	Autonomy 48h	Strobe 0,5 Hz
Dimensios (WxHxD) 325 x 225 x 46 mm	Weight 910g (with battery); 600g (without battery)	

PRODUCT REFERENCE

NSE-I

R&D SERVICES

CONSULTANCY & PROJECT

NIBBLE is a reference in the Management and Development of Electronic Engineering and Electronic Prototyping Projects, with internal Research & Development.
The internal capacity to develop technically advanced products and solutions, based on the latest technologies, allows for customized projects and to respond to different requests and needs of Customers.
The company is part of the COTEC PME Innovation Network, which brings together the most innovative group of SMEs in Portugal. NIBBLE's Research, Development and Innovation Management System (SGIDI - NP 4457) is certified by SGS, which brings extra recognition, by an external and independent entity, of the good R&D+I practices of the team.

ENGINEERING PROJECTS ELECTRONIC ENGENEERING AND DIGITAL SYSTEMS PROJECTS

NIBBLE presents itself to the market as a company specialized in Electronic Engineering and Digital Systems Projects, triggering the entire process of project management and design:

1. Planning and Specification of details and definition of objectives
2. Generation, Evaluation and Selection of Concepts
3. Design and Development
4. Prototype, Testing and Validation
5. Delivery of Results and Documentation

ELECTRONICS PROTOTYPING

NIBBLE offers a complete solution in terms of the Electronic Prototyping service, carrying out the process since the project's concession, to the Research and Development and , finally, manufacturing the final solution.

1. Idea
2. Design and Modeling
3. Prototype
4. Final Solution

NIBBLE®

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NORTE2020
PROGRAMA OPERACIONAL REGIONAL DO NORTE

PORTUGAL 2020

UNIÃO EUROPEIA
Fundo Europeu
de Desenvolvimento Regional