REDBAN

Fire and Gas Control Systems



PRODUCT CATALOGUE

REDBAN

ABOUT US

Redban Electronics is an electronics manufacturing company established in 2019, with managerial and technical experience of over 21 years. Due to this connection, Redban has abundant experience, skills and technical knowledge in the field. It even built up this heritage with new innovations, namely gas detection systems. Currently, Redban prides itself from its quality security solutions in terms of technology, quality and reliability.

Redban specializes in gas detection and control systems. To achieve this, the company continually enhances its highly sophisticated products through engineering, research, design, prototyping, and then introduces them to the market. Additionally, Redban Electronics continues to work on fire detection and control systems, manufacturing products that meet international standards and hold all necessary certifications for this field of work. The RAAP (Redban Addressable Advanced Protocole) developed by Redban introduces effective solutions to fire and gas control systems as well as SCADA systems. This is made possible through the smart addressable interactive communication protocole. Many years of experience in designing and producing security solutions, we are committed to becoming a technological leader in our sector. We take great pride in being a Turkish manufacturing company that develops its own products domestically.

FIRE ALARM & CONTROL SYSTEMS

S3

S1

S2



Many years of work and experience in the field of fire detection systems, we have seen that user needs can basically be divided into three parts. These can be classified as small-scale projects, medium-scale projects and large-scale projects. As Redban Electronics, We designed our products with 3 different solution suggestions to compensate these requirements. Thus, we can offer the appropriate solution according to the user's needs in all kinds of projects. Solution 1 includes a system made of PC/ABS material and consisting of a single panel to be used in small-scale projects. The purpose of this solution is to prevent high product costs in a small project. Solution 2 is designed for medium-sized projects. It allows you to control more areas with the metal case panel and repeater panel option. Solution 3 is a system that can be easily used in large-scale projects. 32 panels consisting of metal case can be networked with each other. In this way, you can ensure the fire safety of very large structures or more than one structure. You can also track and control all event records on a computer with the connection to monitoring and control software in all Redban panels.

REDBAN



DESIGN & INVENTION
RESEARCH & DEVELOPMENT
HARDWARE & SOFTWARE
MOLDING

QUALITY MANAGEMENT
ISO 9001: 2015
PROCESS CONTROL
ANNUAL AUDIT





TECHNOLOGY
CERTIFICATION
INTERNATIONAL APPROVALS
CONTINIOUS IMPROVEMENT

PRODUCTION
MANUFACTURING
SMT PICK & PLACE
AUTOMATION





QUALITY CONTROL
TEST
CALIBRATION
AGING

EXPERIENCE
SIMPLICITY
RELIABILITY
SUSTAINABILITY
DURABILITY



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ADDRESSABLE FIRE DETECTION AND CONTROL SYSTEM

SOLUTION 1

AP104 ADDRESSABLE FIRE ALARM CONTROL PANEL



REDBAN
S1
SOLUTION 1

EN 54-2 EN 54-4

EN54-2:1997 + EN54-4:1997
CPR No: 1922-CPR-1946

REDBAN AP104 Addressable Fire Alarm Panel is a high specification intelligent addressable control panel that operates on the RAAP protocol.
These panels combine sophisticated functionality with simple operation and an aesthetically pleasing design, making them suitable for surface or recessed mounting with a moulded polycarbonate enclosure.
This panel comes with a modular design and can be supplied in 1, 2 and 4 loop versions. Each loop can supervise up to 200 devices.
The user interface has 128x64 graphic lcd display, function buttons and indicator leds. The device includes seperate indicator leds for 32 different zones; Trouble leds, Sound and Alarm indicators, Power, Ready, By-pass indicator leds as described in EN54-2/4 European Norm. All system conditions are displayed on the central via seperate indicator leds as well. The central supervises system troubles, conditions and displays them to the user. Using the Reset, Alarm, Cancel Alarm, Silence, Test and Evacuate buttons, user can easily perform system functions. The general system indicators: Power, Ready, Prealarm, Fire Alarm, Cancel Alarm, Silence and Evacuate indicator leds are displayed on the left-hand side of the central, while Trouble indicator leds include Ac Loss, Battery Error and Siren Errors are displayed in the right-hand side of the central.
The REDBAN AP104 Addressable Fire Alarm Panel is an interactive digital addressable fire detection and alarm system ideally suited for small and medium sized buildings such as residential buildings, shops, hotels, warehouses and offices.
The control panel is designed, manufactured and tested to fully meet the requirements of EN 54 part 2 and part 4. Specifically designed PY100 software is available for configuring the panel and can be downloaded / uploaded to the system via the onboard USB connection.
Simple and flexible installation, comissioning, configuring make Redban systems the preferred fire alam system. User-friendly programming and robust operation are the goals of the AP104 panel.

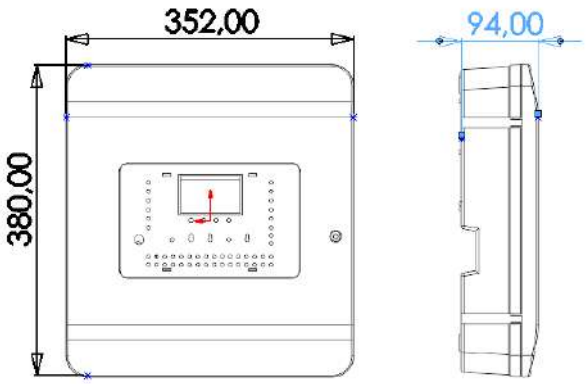
Features

- Available in 1-4 loop versions
- Robust and aesthetic PC/ABS case
- Programmable 250 zones/32 zone leds
- 128x64 LCD screen
- 20 character zone & device names
- Intelligent addressable RAAP protocol
- Configuration and control software
- User friendly programming
- Flexible scenario
- Onboard USB & 2 RS485 interface
- Day&Night mode delays per zone
- Turkish & English language
- Real time clock
- 65000 Event log with time stamp
- EN54-2 & EN54-4 Certified



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TECHNICAL SPECIFICATIONS	AP104-1	AP104-2	AP104-4
OPERATING VOLTAGE	180-240 Vac	180-240 Vac	180-240 Vac
POWER CONSUMPTION	100 Watt	100 Watt	100 Watt
NUMBER OF LOOP	1	1-2	1-4
NUMBER OF DEVICES IN THE LOOP	200	200	200
MAXIMUM NUMBER OF DEVICES OF THE PANEL	200	400	800
LOOP CURRENT	230 mA	230 mA	230 mA
LOOP LOAD	120 Ω	120 Ω	120 Ω
BATTERY TYPE	Sealed Lead Acid Battery	Sealed Lead Acid Battery	Sealed Lead Acid Battery
BATTERY CAPACITY	2 X12V 7Ah	2 X12V 7Ah	2 X12V 7Ah
BATTERY SHORT-CIRCUIT PROTECTION	Yes	Yes	Yes
SIREN SUPERVISED OUTPUTS	2	2	2
OUTPUT TYPE	Relay N.Open Contact	Relay N.Open Contact	Relay N.Open Contact
CONTACT STRENGTH	2A @ 30V DC	2A @ 30V DC	2A @ 30V DC
FUSE	400 mA, Auto Reset	400 mA, Auto Reset	400 mA, Auto Reset
OUTPUT VOLTAGE	27,6 Vdc	27,6 Vdc	27,6 Vdc
END OF LINE RESISTANCE	6.8 K Ω 1/4 Watt	6.8 K Ω 1/4 Watt	6.8 K Ω 1/4 watt
GENERAL PURPOSE OUTPUTS	3	3	3
OUTPUT TYPE	Open Collector	Open Collector	Open Collector
OUTPUT CURRENT	50 mA	50 mA	50 mA
ALARM RELAY OUTPUT			
OUTPUT TYPE	N.Open (NO), N.Closed (NC)	N.Open (NO), N.Closed (NC)	N.Open (NO), N.Closed(NC)
CONTACT STRENGTH	2 A @ 30 v DC	2 A @ 30 v DC	2 A @ 30 v DC
ERROR RELAY OUTPUT			
OUTPUT TYPE	N.Open (NO), N.Closed (NC)	N.Open (NO), N.Closed (NC)	N.Open (NO), N.Closed (NC)
CONTACT STRENGTH	2 A @ 30 v DC	2 A @ 30 v DC	2 A @ 30 v DC
24V DC PROTECTED VOLTAGE OUTPUT	Yes	Yes	Yes
OUTPUT CURRENT	400 mA, Resettable Fused	400 mA, Resettable Fused	400 mA, Resettable Fused
24V DC NOT PROTECTED VOLTAGE OUTPUT	Yes	Yes	Yes
OUTPUT CURRENT	2A (Unfused)	2A (Unfused)	2A (Unfused)
SERIAL DATA INTERFACE (USB - RS485)	1-2	1-2	1-2
BAUDRATE	9600 BPS	9600 BPS	9600 BPS
DATA BITS	8	8	8
PARITY BIT	None	None	None
STOP BIT	1	1	1
FLOW CONTROL	None	None	None
DATA RETENTION	10 Year	10 Year	10 Year
GK120 POWER SUPPLY (Parameters)			
Battery Resistance	400 mΩ	400 mΩ	400 mΩ
EN54-4 Test Parameters Imin, Imaxa, Imaxb	27mA, 1.5A, 1.8A	27mA, 1.5A, 1.8A	27mA, 1.5A, 1.8A

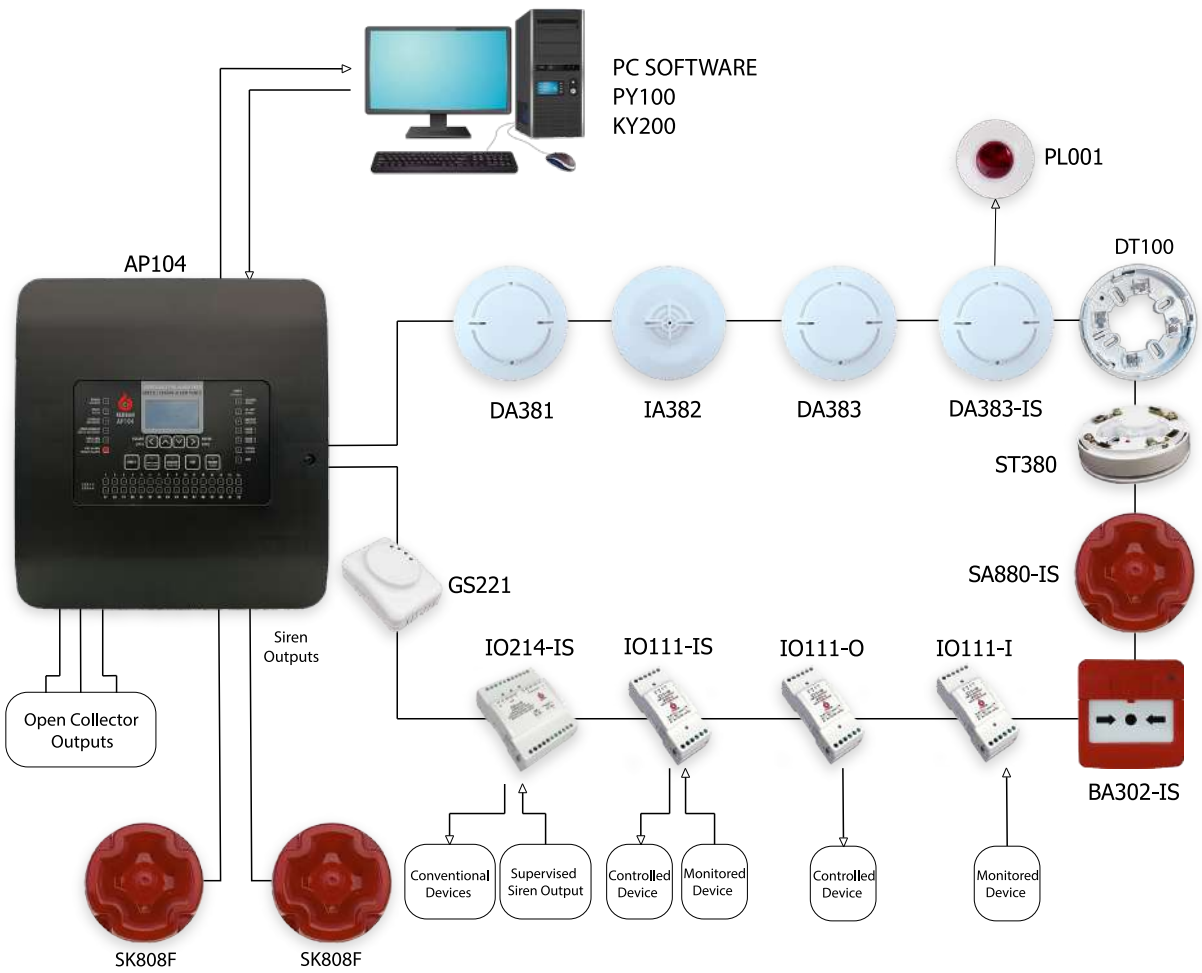


ENVIRONMENTAL SPECIFICATIONS	
OPERATING TEMPERATURE	-10 °C ≈ +55°C
HUMIDITY	%0 ≈ %95 Relative Humidity
ENVIRONMENTAL CATEGORY	IP30
PHYSICAL SPECIFICATIONS	
CASE MATERIAL	PC/ABS
DIMENSIONS (H x W x D)	38 x 35,2 x 9,4 cm
WEIGHT	2,6 Kg (without battery)

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S1 ADDRESSABLE FIRE DETECTION AND CONTROL SYSTEM SOLUTION 1

SCHEMATIC DIAGRAM



RELEATED DEVICES

Model	Device	Base Used			Indicator Output	Built in isolator
		DT100	DT200	Sounder Base		
DA381	Smoke Detector	✓	✓	✓	✓	-
DA381-IS	Smoke Detector with Built-in Isolator	✓	✓	✓	✓	✓
DA382	Heat Detector	✓	✓	✓	✓	-
DA382-IS	Heat Detector with Built-in Isolator	✓	✓	✓	✓	✓
DA383	Combined Detector	✓	✓	✓	✓	-
DA383-IS	Combined Detector with Built-in Isolator	✓	✓	✓	✓	✓
BA302	Manual Call Point	-	-	-	-	-
BA302-IS	Manual Call Point with Built-in Isolator	-	-	-	-	✓
IO111	Input/Output Module	-	-	-	-	-
IO111-I	Input Module	-	-	-	-	-
IO111-O	Output Module	-	-	-	-	-
IO111-IS	Input/Output Module with Built-in Isolator	-	-	-	-	✓
IO111-I-IS	Input Module with Built-in Isolator	-	-	-	-	✓
IO111-O-IS	Output Module with Built-in Isolator	-	-	-	-	✓
IO214	Addressable Conventional Input/Siren Supervised Output Module	-	-	-	-	-
IO214-I	Addressable Conventional Input Module	-	-	-	-	-
IO214-O	Siren Supervised Output Module	-	-	-	-	-
IO214-IS	Addressable Conventional Input/ Siren Supervised Output Module with Built-in Isolator	-	-	-	-	✓
IO214-I-IS	Addressable Conventional Input Module with Built-in Isolator	-	-	-	-	✓
IO214-O-IS	Siren Supervised Output Module with Built-in Isolato	-	-	-	-	✓
GS221	Methane/Butane Gas Detector	-	-	-	-	-
SA880	Addressable Sounder with Flasher	✓	✓	-	-	-
SA880-IS	Addressable Sounder with Flasher with Built-in Isolator	✓	✓	-	-	✓

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ACCESSORIES

LK204-RB LOOP CARD



LK204-RB Loop Card is used to effectively connect and monitor devices in large facilities and fire safety systems. It functions as a reliable device with its high capacity, supervision capabilities and compatibility. LK204-RB is compatible with AP104 and AP304 panels. Each loop card enables the connection of 200 devices and complies with loop A class operation.

RB1201 ADDRESS PROGRAMMER



Address Programmer is a device used to assign addresses to addressable devices (fire detection and carbon monoxide detection) and to set other desired features. Turkish and English language support allows users to perform operations according to their preferences. RB1201 address programmer is a portable device and works with 4 AAA batteries, making it suitable for field survey.

PL001 INDICATOR LED



PL001 is red, wide light emitting indicator for use with conventional and addressable detectors. The device indicates if the detector is in alarm condition where the detectors cannot be easily seen.

BK-01 MCP PROTECTIVE COVER



Protective cover is used to prevent unnecessary or accidental activation of Manual Call Point. Seal can be used with the apparatus attached to the body. It is made of robust plastic material. Therefore it is resistant to impacts.

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DA381, DA381-IS, DA382, IA382, DA382-IS, DA383, DA383-IS ADDRESSABLE DETECTORS





XA38x Addressable detector series are specially designed to detect smoke, heat or both caused by fire in the environment and transmit the detection information to Redban control panels.
The detector features a plug-in type photoelectic smoke sensor and thermistor with addressable analog communications. The sensor transmits an analog representation of smoke density and heat rise over a communication line to a control panel. Inside MCU's EEPROM, the sensor's address is stored and can be set by a portable address setting device called RB1201 Device Programmer. The detector can be assigned an address ID ranging from 1 to 200.
The DA383-IS Model is similar to the DA383 detector, but with the addition of an isolator built into the DA383. The built-in isolator enables part of the communications loop to continue operating in the event of a short circuit The module will automatically restore the entire communications loop to the normal condition when the short circuit is removed.
The smoke perception part or the heat perception of the detector can be disabled either by the device programmer or through program settings from the panel.
DA381 (Smoke Detector), DA382 (Heat Detector), and DA383 (Combined Detector) models are available, with built-in isolators implemented in DA381-IS, DA382-IS, and DA383-IS variants.
The heat detector side (DA382 & IA382) is Class A1 (EN54-5) heat detector.
Upon activation, The DA383 illuminates two red indicator through light guides, situated on the detector head.

Features
- Robust and aesthetic PC/ABS case
- Microprocessor based design
- Double sided light path indicator
- Self calibration
- Eliminate false alarms
- Built-in Isolator
- Led indicator output
- Class A1 Heat Perception
- Programmable by RB1201 address programmer
- Address and data stored in nonvolatile memory
- EN54-5, EN54-7 & EN54-17 Certified

EN 54-5 EN 54-7 EN 54-17

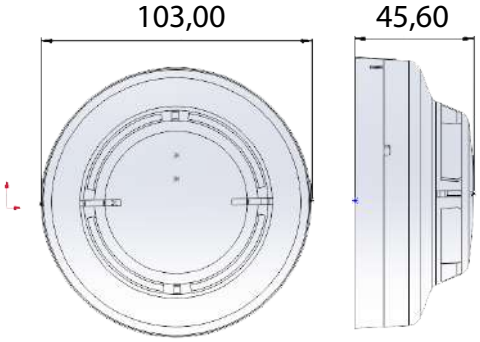
EN54-5:2017 + EN54-7:2018 + EN54-17:2005
CPR No: 1922-CPR-2166

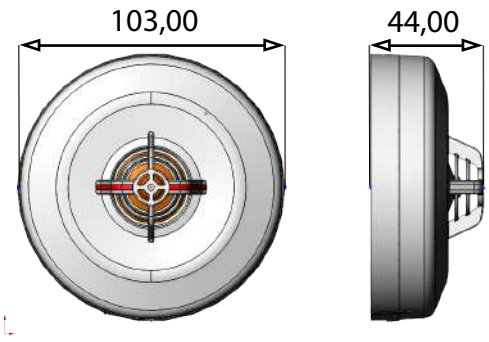


REDBAN
Fire and Gas Control Systems

TECHNICAL SPECIFICATIONS

	DA381/DA381-IS	IA382/DA382/DA382-IS	DA383/DA383-IS
DESCRIPTION	Optical Smoke Detector	Heat Detector	Combined Detector
STANDARDS	EN54-7/17	EN54-5/17	EN54-5/7/17
LOOP OPERATING VOLTAGE	16 - 30 Vdc	16 - 30 Vdc	16 - 30 Vdc
LOOP OPERATING CURRENT	<200µA @ 24 Vdc	<200µA @ 24 Vdc	<200µA @ 24 Vdc
MAXIMUM ALARM CURRENT	<4 mA @ 24 VDC (LED on)	<4 mA @ 24 VDC (LED on)	<4 mA @ 24 VDC (LED on)
ADDRESSING MODE	Manual Addressing	Manual Addressing	Manual Addressing
SPECIFICATIONS			
SYSTEM WIRING	1,5 mm² 2 core loop	1,5 mm² 2 core loop	1,5 mm² 2 core loop
AREA COVERAGE	50 m²	50 m²	50 m²
MOUNTING POSITION	Ceiling Mount	Ceiling Mount	Ceiling Mount
MOUNTING BASES	DT100, DT200, ST380	DT100, DT200, ST380	DT100, DT200, ST380
HEAT CLASS	N/A	Class A1	Class A1
INDICATION	360° visibily led indicator	360° visibily led indicator	360° visibily led indicator
SENSITIVITY	0,23 dB/m	N/A	0,23 dB/m
ISOLATOR SPECIFICATIONS			
ISOLATOR TYPE/SWITCH CURRENT	SSCS (A.3) / 230-400mA	SSCS (A.3) / 230-400mA	SSCS (A.3) / 230-400mA
ISOLATOR RECONNECT/LEAKAGE CURRENT	3-13mA / max. 18mA	3-13mA / max. 18mA	3-13mA / max. 18mA
STANDBY CURRENT/SERIAL RESISTANCE	max. 150uA / max. 1 ohm	max. 150uA / max. 1 ohm	max. 150uA / max. 1 ohm
ENVIRONMENTAL SPECIFICATIONS			
HUMIDITY	10% - 93% Relative Humidity	10% - 93% Relative Humidity	10% - 93% Relative Humidity
	Non-condensing	Non-condensing	Non-condensing
OPERATING TEMPERATURE	-10°C - 50°C	-10°C - 50°C	-10°C - 50°C
ENVIRONMENTAL CATEGORY	IP21	IP21	IP21
COMPATIBILTY			
AP104 ADDRESSABLE FIRE PANEL	Yes	Yes	Yes
AP204 ADDRESSABLE FIRE PANEL	No	No	No
AP304 ADDRESSABLE FIRE PANEL	Yes	Yes	Yes
PHYSICAL SPECIFICATIONS			
CASE MATERIAL	PC/ABS Case	PC/ABS Case	PC/ABS Case
DIMENSIONS (H x D)	45,6 x 103 mm	44 / 45,6 x 103 mm	45,6 x 103 mm





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GS221 ADDRESSABLE GAS DETECTOR





GS221 addressable gas detector is designed to detect gas leaks, to generate an alarm and to transmit this information to the control panel. GS221 addressable gas detector can worked with all Redban control panels. It can detect all kinds of flammable and combustible gases. The device detects gases such as Natural gas (methane), bottled gas (propane), LPG (Liquefied petroleum gas), CNG (natural gas).
When a gas leakage is detected, analog data is transmitted to the control panel over a communication line. Thanks to the relay output on it, it can be operated independent of the panel with only 24V supply. When GS221 detects while operating independent of the panel, the relay output active on it. In this way, a desired device (such as a gas valve) can be controlled. GS221 Gas detector is addressed by RB1201 Address programmer and this address information is stored in its permanent memory.

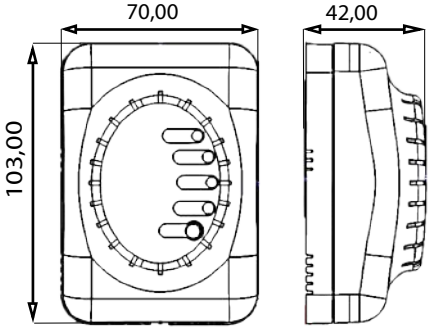
Features
- Robust and aesthetic PC/ABS case
- Microprocessor based design
- Light path indicator
- Test button
- NO / NC Relay output
- Programmable with RB1201 address programmer
- Address and data stored in nonvolatile memory
- Ability to work standalone
- EN 50194-1 standard

EN 50194-1

EN 50194-1:2009 + EN 60335-1:2020
EN 50270:2015 + EN 61000-6-3:2021
CoC No: 353

TECHNICAL SPECIFICATIONS

LOOP OPERATING VOLTAGE	16 - 30 Vdc
LOOP OPERATING CURRENT	<150µA @ 24 VDC (every 8 seconds with LED blink enabled)
MAXIMUM ALARM CURRENT	<7 mA @ 24 VDC (LED on)
ENVIRONMENTAL SPECIFICATIONS	
HUMIDITY	10% - 93% Relative Humidity, Non-condensing
OPERATING TEMPERATURE	-10°C - 50°C
SENSOR LIFE	5 Years
COVERAGE AREA	max. 50 m³

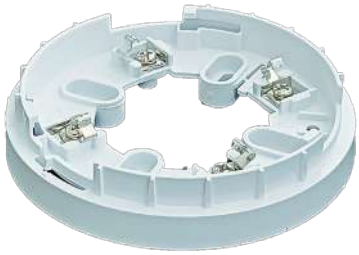


PHYSICAL SPECIFICATIONS	
CASE MATERIAL	PC/ABS Case
DIMENSIONS (H x W x D)	103 x 70 x 42 mm
WEIGHT	150 grams

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DETECTOR BASES

DT100 DETECTOR BASE



DT100 is used to assemble detectors and to connect cables. It works compatible with addressable Redban XX38x series detectors,allowing you to use different detector types in the same system. It can be mounted on all surfaces.

DT200 DETECTOR BASE FOR SURFACE MOUNTING



DT200 is used to assemble detectors and to connect cables. It works compatible with both addressable Redban XX38x detectors, allowing you to use different detector types in the same system. It is suitable for use in areas with surface-mounted cabling.

ST380 SOUNDER BASE



ST380 Sounder Base is an important component of fire alarm systems. It adapts to various warning scenarios with its addressable and programmable features. It can effectively transmit emergency alerts with high volume and multi-device support. Additionally, its design requires no external power supply, making installation simple. Up to 40 pieces of ST380 can be operated in one loop.

SUPPORTED DEVICES

DA381 Addressable Optical Smoke Detector
DA382 Addressable Heat Detector
IA382 Addressable Heat Detector
DA383 Addressable Combined Detector
DA381-IS Addressable Optical Smoke Detector with Built-in Isolator
DA382-IS Addressable Heat Detector with Built-in Isolator
DA383-IS Addressable Combined Detector with Built-in Isolator

IO111-I, IO111-I-IS, IO111-O, IO111-O-IS, IO111, IO111-IS ADDRESSABLE INPUT/OUTPUT MODULE





IO111/IO111-X-X Module series is designed to gather inputs from outside of the fire alarm system or provide output to control the devices that indicate alarms or trigger any device connected to the system.
All modules are certified by EN54 standard, which is the European standard (EN54-18 for ınput/output module, EN54-17 for short-circuit isolator).
IO111-I or IO111-I-IS is used to connect devices from outside the system that need to be included. IO111-I or IO111-I-IS can monitor the fault and alarm status of any device with relay contact. This capability allows devices that are not compatible with the fire panel to be added to the system.
IO111-O or IO111-O-IS can trigger any warning device in response to an alarm occurring in the fire alarm system. It is not affected by a power outage when changing relay direction.
IO111 or IO111-IS monitors the devices connected to its input and can control the desired devices in response to an alarm. It can be programmed as an input-only, output-only, or both input and output module using the programming device.
Each module in the IO111-X-X module series is available in models with and without a built-in isolator. The designation "IS" indicates that the device has a built-in isolator.

Features
- Input/Output Module
- Smart Addressable RAAP Protocol
- Powered by the loop
- Programmable with RB1201
- Two indicator LEDs
- Built-in isolator
- Memory Relay Output
- Open Circuit, Short Circuit and Alarm Detection
- Rail Mount and Wall Mount
- EN54-18 & EN54-17 Certified

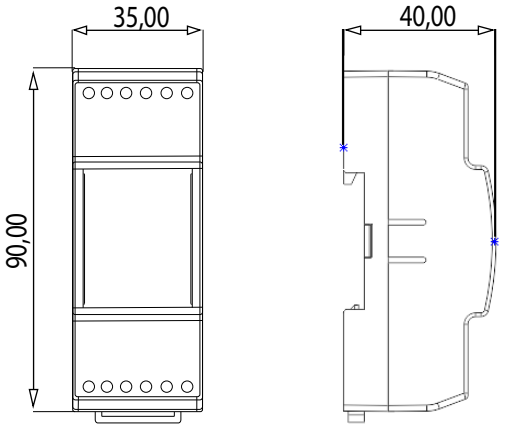
EN 54-18 EN 54-17

EN54-18:2005 + EN54-17:2005
CPR No: 1922-CPR-1948

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TECHNICAL SPECIFICATIONS

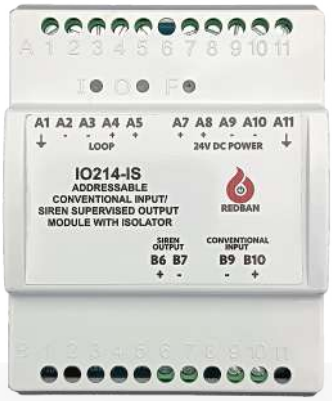
	IO111/IO111-IS	IO111-I/IO111-I-IS	IO111-O/IO111-O-IS
DESCRIPTION	Input/Output Module	Input Module	Output Module
STANDARDS	EN54-18/17	EN54-18/17	EN54-18/17
LOOP OPERATING VOLTAGE	16 - 30 Vdc	16 - 30 Vdc	16 - 30 Vdc
LOOP OPERATING CURRENT	<150µA @ 24 Vdc	<150µA @ 24 Vdc	<150µA @ 24 Vdc
MAXIMUM ALARM CURRENT	<12mA @ 24 Vdc (LED on)	<12 mA @ 24 Vdc (LED on)	<12 mA @ 24 Vdc (LED on)
RELAY CONTACT STRENGTH	300mA @ 24 Vdc	N/A	300mA @ 24 Vdc
SERIAL RESISTANCE	max. 1 Ohm	max. 1 Ohm	max. 1 Ohm
ADDRESSING MODE	Manuel Addressing	Manuel Addressing	Manuel Addressing
SPECIFICATIONS			
SYSTEM WIRING	Min. 0,8 mm² 2 core loop	Min. 0,8 mm² 2 core loop	Min. 0,8 mm² 2 core loop
MOUNTING POSITION	Wall Mount	Wall Mount	Wall Mount
MOUNTING OPTIONS	Surface Mount with Screw	Surface Mount with Screw	Surface Mount with Screw
	Rail Mount with Apparatus	Rail Mount with Apparatus	Rail Mount with Apparatus
ISOLATOR SPECIFICATIONS			
ISOLATOR TYPE/SWITCH CURRENT	SSCS (A.3) / 230-400mA	SSCS (A.3) / 230-400mA	SSCS (A.3) / 230-400mA
ISOLATOR RECONNECT/LEAKAGE CURRENT	3-13mA / max. 18mA	3-13mA / max. 18mA	3-13mA / max. 18mA
STANDBY CURRENT/SERIAL RESISTANCE	max. 150uA / max. 1 ohm	max. 150uA / max. 1 ohm	max. 150uA / max. 1 ohm
ENVIRONMENTAL SPECIFICATIONS			
HUMIDITY	10% - 93% Relative Humidity	10% - 93% Relative Humidity	10% - 93% Relative Humidity
	Non-condensing	Non-condensing	Non-condensing
OPERATING TEMPERATURE	-10°C - 50°C	-10°C - 50°C	-10°C - 50°C
ENVIRONMENTAL CATEGORY	IP21	IP21	IP21
COMPATIBILTY			
AP104 ADDRESSABLE FIRE PANEL	Yes	Yes	Yes
AP204 ADDRESSABLE FIRE PANEL	Yes	Yes	Yes
AP304 ADDRESSABLE FIRE PANEL	Yes	Yes	Yes



PHYSICAL SPECIFICATIONS	
CASE MATERIAL	PC/ABS Case
DIMENSIONS (H x W x D)	90 x 35 x 40 mm
WEIGHT	70 grams

REDBAN
Fire and Gas Control Systems

IO214, IO214-IS, IO214-I, IO214-I-IS, IO214-O, IO214-O-IS
ADDRESSABLE CONVENTIONAL INPUT
SUPERVISED SIREN OUTPUT





IO214/IO214-X-X Module is designed to gather conventional inputs from outside of the fire alarm system or provide output to sounders that will indicate any alarms or trigger any sounder connected to the system.
All modules are certified by EN54 standard, which is the European standard (EN54-18 for ınput/output module, EN54-17 for short-circuit isolator).
IO214-I or IO214-I-IS is used to include conventional devices in the addressable system. IO214-I or IO214-I-IS can operate 32 conventional devices each, allowing for the addition of more devices to the system with just one address.
Output assignment can be made to IO214-O or IO214-O-IS according to the desired scenario. Based on this assignment, it can control a siren or any other device that operates with 24V.
IO214 or IO214-IS can function as both a conventional input and supervised siren output. It can be programmed as an input-only, output-only, or both input and output module using the RB1201 address programmer.
Each module in the IO214-X-X module series is available in models with and without built-in isolator.

Features
- Smart Addressable RAAP Protocol
- Conventional Input
- Supervised Siren Output
- Programmable with RB1201
- Three indicator LEDs
- Built-in isolator
- Open Circuit, Short Circuit and Alarm Detection
- Rail Mount and Wall Mount
- EN54-18 & EN54-17 Certified

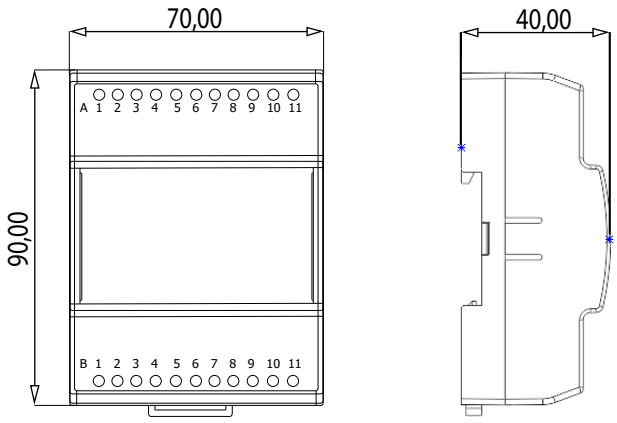
EN 54-18 EN 54-17

EN54-18:2005 + EN54-17:2005
CPR No: 1922-CPR-1949

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Fire and Gas Control Systems

TECHNICAL SPECIFICATIONS

	IO214/IO214-IS	IO214-I/IO214-I-IS	IO214-O/IO214-O-IS
DESCRIPTION	Conventional Input / Supervised Siren Output	Conventional Input	Supervised Siren Output
STANDARDS	EN54-18/17	EN54-18/17	EN54-18/17
LOOP OPERATING VOLTAGE	16 - 30 Vdc	16 - 30 Vdc	16 - 30 Vdc
LOOP OPERATING CURRENT	<150µA @ 24 Vdc	<150µA @ 24 Vdc	<150µA @ 24 Vdc
MAXIMUM ALARM CURRENT	<12mA @ 24 Vdc (LED on)	<12 mA @ 24 Vdc (LED on)	<12 mA @ 24 Vdc (LED on)
RELAY CONTACT STRENGTH	300mA @ 24 Vdc	N/A	300mA @ 24 Vdc
SERIAL RESISTANCE	max. 1 Ohm	max. 1 Ohm	max. 1 Ohm
ADDRESSING MODE	Manuel Addressing	Manuel Addressing	Manuel Addressing
SPECIFICATIONS			
SYSTEM WIRING	Min. 0,8 mm² 2 core loop	Min. 0,8 mm² 2 core loop	Min. 0,8 mm² 2 core loop
MOUNTING POSITION	Wall Mount	Wall Mount	Wall Mount
MOUNTING OPTIONS	Surface Mount with Screw Rail Mount with Apparatus	Surface Mount with Screw Rail Mount with Apparatus	Surface Mount with Screw Rail Mount with Apparatus
ISOLATOR SPECIFICATIONS			
ISOLATOR TYPE/SWITCH CURRENT	SSCS (A.3) / 230-400mA	SSCS (A.3) / 230-400mA	SSCS (A.3) / 230-400mA
ISOLATOR RECONNECT/LEAKAGE CURRENT	3-13mA / max. 18mA	3-13mA / max. 18mA	3-13mA / max. 18mA
STANDBY CURRENT/SERIAL RESISTANCE	max. 150uA / max. 1 ohm	max. 150uA / max. 1 ohm	max. 150uA / max. 1 ohm
ENVIRONMENTAL SPECIFICATIONS			
HUMIDITY	10% - 93% Relative Humidity Non-condensing	10% - 93% Relative Humidity Non-condensing	10% - 93% Relative Humidity Non-condensing
OPERATING TEMPERATURE	-10°C - 50°C	-10°C - 50°C	-10°C - 50°C
ENVIRONMENTAL CATEGORY	IP21	IP21	IP21
COMPATIBILTY			
AP104 ADDRESSABLE FIRE PANEL	Yes	Yes	Yes
AP204 ADDRESSABLE FIRE PANEL	Yes	Yes	Yes
AP304 ADDRESSABLE FIRE PANEL	Yes	Yes	Yes



PHYSICAL SPECIFICATIONS	
CASE MATERIAL	PC/ABS Case
DIMENSIONS (H x W x D)	90 x 70 x 40 mm
WEIGHT	90 grams

REDBAN
Fire and Gas Control Systems

BA302-IS ADDRESSABLE MANUAL CALL POINT WITH BUILT-IN ISOLATOR





BA302-IS Addressable Resettable Manual Call Point with built-in isolator is designed for manual notification of fire or emergency situation in the addressable fire system. It can be activated by pressing the resettable plastic aparatus in front of it. An animated notification LED is present, and when the button is active, this LED stays constantly lit. After pressing the aparatus, it can be reset with special key. When the button is pressed and activated, it transmits the fire information to the control panel over the communication line. The address given to the MCP by the RB1201 Address Programmer is saved and stored in the memory. There is also a model without built-in ısolator as BA302.

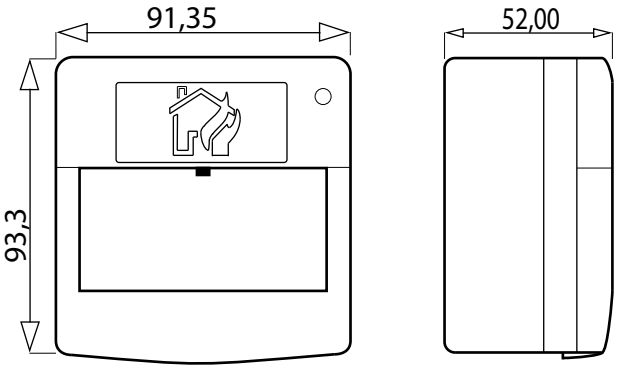
Features

- Robust and aesthetic PC/ABS case
- Programmable address information in nonvola tile memory
- Programmable with RB1201 Address programmer
- Led indicator
- Resettable with special key
- Competible with EN54-11 & EN54-17

EN54-11:2001 + EN54-17:2005

TECHNICAL SPECIFICATIONS

LOOP OPERATING VOLTAGE	16 - 30 Vdc
LOOP OPERATING CURRENT	<150µA @ 24 VDC (every 8 seconds with LED blink enabled)
MAXIMUM ALARM CURRENT	<4 mA @ 24 VDC (LED on)
ISOLATOR SPECIFICATIONS	
ISOLATOR TYPE/SWITCH CURRENT	SSCS (A.3) / 230-400mA
ISOLATOR RECONNECT/LEAKAGE CURRENT	3-13mA / max. 18mA
STANDBY CURRENT/SERIAL RESISTANCE	max. 150uA / max. 1 ohm
ENVIRONMENTAL SPECIFICATIONS	
HUMIDITY	10% - 93% Relative Humidity, Non-condensing
OPERATING TEMPERATURE	-10°C - 50°C



PHYSICAL SPECIFICATIONS

CASE MATERIAL	PC/ABS Case
DIMENSIONS (H x W x D)	93,3 x 91,35 x 52 mm
WEIGHT	120 grams

REDBAN
Fire and Gas Control Systems

SA880-IS ADDRESSABLE FIRE ALARM SIREN WITH BUILT-IN ISOLATOR





SA880-IS Addressable Indoor Siren is designed for audio/visual warning in addressable system. SA880-IS is ideal for providing warnings in fire and security applications of buildings such as hotels and residences during emergency situations. It emits a loud warning to ensure the evacuation of building occupants. SA880-IS series sirens can be connected by the loop in the addressable fire alarm system. In addition, in case of a short circuit in the loop line, it isolates the next part of the loop line using the internal isolator. Upon activation, the SA880-IS initiates an auditory alert and also provides a visual alert with a red indicator and a white flash. These indicators have a 360° field of view. The device can be reset by de-energizing the power supply.

Features

- Robust and aesthetic PC/ABS case
- Transparent red color
- visual warning led and flash
- 86 dB sound intensity at 1 meter (max. 105dB)
- Loop powered
- Programmable with RB1201 address programmer
- Programmable address information in nonvolatile memory
- EN54-3 & EN54-17 Certified

EN54-3:2001 + EN54-17:2005

CPR No: 1922-CPR-2167

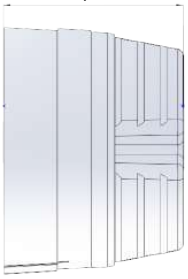
TECHNICAL SPECIFICATIONS

LOOP OPERATING VOLTAGE	16 - 30 Vdc
LOOP OPERATING CURRENT	<150µA @ 24 VDC (every 8 seconds with LED blink enabled)
MAXIMUM ALARM CURRENT	<12 mA @ 24 VDC (LED on)
SOUND INTENSITY	86 dB nom. (max. 105 dB)
ISOLATOR SPECIFICATIONS	
ISOLATOR TYPE/SWITCH CURRENT	SSCS (A.3) / 230-400mA
ISOLATOR RECONNECT/LEAKAGE CURRENT	3-13mA / max. 18mA
STANDBY CURRENT/SERIAL RESISTANCE	max. 150uA / max. 1 ohm
ENVIRONMENTAL SPECIFICATIONS	
HUMIDITY	10% - 93% Relative Humidity, Non-condensing
OPERATING TEMPERATURE	-10°C - 50°C

106,00



78,00



PHYSICAL SPECIFICATIONS	
CASE MATERIAL	PC/ABS Case
DIMENSIONS (H x D)	78 x 106 mm
WEIGHT	140 grams

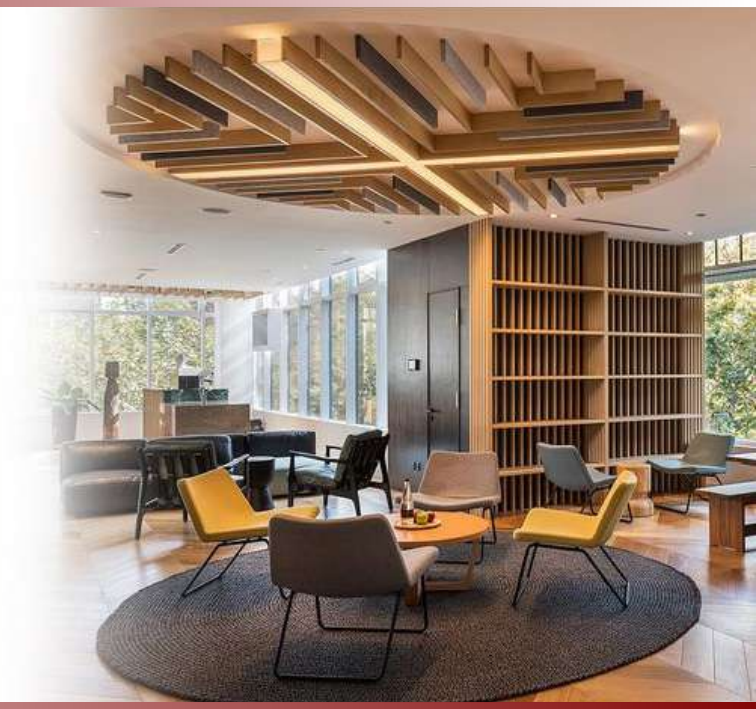
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Fire and Gas Control Systems



ADDRESSABLE FIRE DETECTION AND CONTROL SYSTEM

SOLUTION 2

AP204 ADDRESSABLE FIRE ALARM CONTROL PANEL



REDBAN
S2
SOLUTION 2

EN 54-2 EN 54-4

EN54-2:1997 + EN54-4:1997
CPR No: 0370-CPR-3289

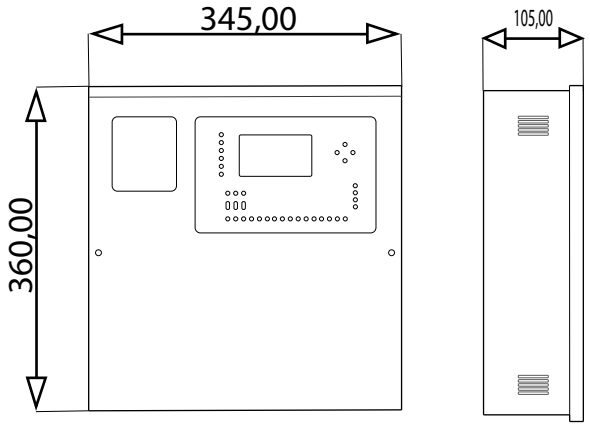
AP204 Addressable Fire Alarm Panel is the main component of Redban Solution 2 series. The panel is working on CDS2 protocole. Solution S2 products work with only S2 device range. S1 and S3 devices do not work with S2 solution range.
REDBAN AP204 Addressable Fire Alarm Panels are designed by the leading technology and microprocessor based devices. Repeater panel connection are onboard in the panel. By connecting Computer, the programming and supervision can be carried out simply. The main goal of the device is robust design and simple user-friendly programming.
On main board, there are 4 loop connectors for LK204-CD loop cards. By installing LK204-CD loop cards the panel can host up to 4 loops. There can be installed 250 detectors per loop upgradable to 1000 devices per panel.
The user interface has 128x64 graphic lcd display, function buttons and indicator leds. On the device there are seperate indicator leds for 16 different zones; Trouble leds, Sound and Alarm indicators, Power, Ready, By-pass indicator leds as described in EN54-2/4 European Norm. All the system conditions are displayed on the central via seperate indicator leds as well. The central supervises system troubles, conditions and displays to the user. By the Reset, Alarm, Cancel Alarm, Silence, Test and Evacuate buttons, user can perform simply the system functions. The general system indicators: Power, Ready, Prealarm, Fire Alarm, Cancel Alarm, Silence and Evacuate indicator leds are displayed on the lefthand of central and the Trouble indicator leds are Ac Loss, Battery Error and Siren Error are displayed in the righthand on the central.

Features

- Available in 1-4 loop versions
- Arm based microprocessor design
- Robust and aesthetic Metal Case
- Programmable 250 zones/16 zone leds
- 128x64 LCD screen
- 20 character zone & device names
- Repeater Panel connectiop
- Configuration and control software
- User friendly programming
- Flexible scenario
- Onboard USB & 2 RS485 interface
- Printer Interface
- Day&Night mode delays per zone
- Turkish & English language
- Real time clock
- 65000 Event log with time stamp
- EN54-2 & EN54-4 Certified



TECHNICAL SPECIFICATIONS	AP204-1	AP204-2	AP204-4
OPERATING VOLTAGE	180-240 Vac	180-240 Vac	180-240 Vac
POWER CONSUMPTION	100 Watt	100 Watt	100 Watt
NUMBER OF LOOP	1	1-2	1-4
NUMBER OF DEVICES IN THE LOOP	250	250	250
MAXIMUM NUMBER OF DEVICES OF THE PANEL	250	500	1000
LOOP CURRENT	180 mA	180 mA	180 mA
LOOP LOAD	120 Ω	120 Ω	120 Ω
BATTERY TYPE	Sealed Lead Acid Battery	Sealed Lead Acid Battery	Sealed Lead Acid Battery
BATTERY CAPACITY	2 X12V 7Ah	2 X12V 7Ah	2 X12V 7Ah
BATTERY SHORT-CIRCUIT PROTECTION	Yes	Yes	Yes
SIREN SUPERVISED OUTPUTS	1	1	1
OUTPUT TYPE	Relay N.Open Contact	Relay N.Open Contact	Relay N.Open Contact
CONTACT STRENGTH	2A @ 30V DC	2A @ 30V DC	2A @ 30V DC
FUSE	400 mA, Auto Reset	400 mA, Auto Reset	400 mA, Auto Reset
OUTPUT VOLTAGE	27,6 Vdc	27,6 Vdc	27,6 Vdc
END OF LINE RESISTANCE	6.8 K Ω 1/4 Watt	6.8 K Ω 1/4 Watt	6.8 K Ω 1/4 watt
GENERAL PURPOSE OUTPUTS	3	3	3
OUTPUT TYPE	Open Collector	Open Collector	Open Collector
OUTPUT CURRENT	50 mA	50 mA	50 mA
ALARM RELAY OUTPUT			
OUTPUT TYPE	N.Open (NO), N.Closed (NC)	N.Open (NO), N.Closed (NC)	N.Open (NO), N.Closed(NC)
CONTACT STRENGTH	2 A @ 30 v DC	2 A @ 30 v DC	2 A @ 30 v DC
ERROR RELAY OUTPUT			
OUTPUT TYPE	N.Open (NO), N.Closed (NC)	N.Open (NO), N.Closed (NC)	N.Open (NO), N.Closed (NC)
CONTACT STRENGTH	2 A @ 30 v DC	2 A @ 30 v DC	2 A @ 30 v DC
24V DC PROTECTED VOLTAGE OUTPUT	Yes	Yes	Yes
OUTPUT CURRENT	400 mA, Resettable Fused	400 mA, Resettable Fused	400 mA, Resettable Fused
24V DC NOT PROTECTED VOLTAGE OUTPUT	Yes	Yes	Yes
OUTPUT CURRENT	2A (Unfused)	2A (Unfused)	2A (Unfused)
SERIAL DATA INTERFACE (USB - RS485)	1-2	1-2	1-2
BAUDRATE	9600 BPS	9600 BPS	9600 BPS
DATA BITS	8	8	8
PARITY BIT	None	None	None
STOP BIT	1	1	1
FLOW CONTROL	None	None	None
DATA RETENTION	10 Year	10 Year	10 Year
GK120 POWER SUPPLY (Parameters)			
Battery Resistance	400 mΩ	400 mΩ	400 mΩ
EN54-4 Test Parameters Imin, Imaxa, Imaxb	27mA, 1.5A, 1.8A	27mA, 1.5A, 1.8A	27mA, 1.5A, 1.8A

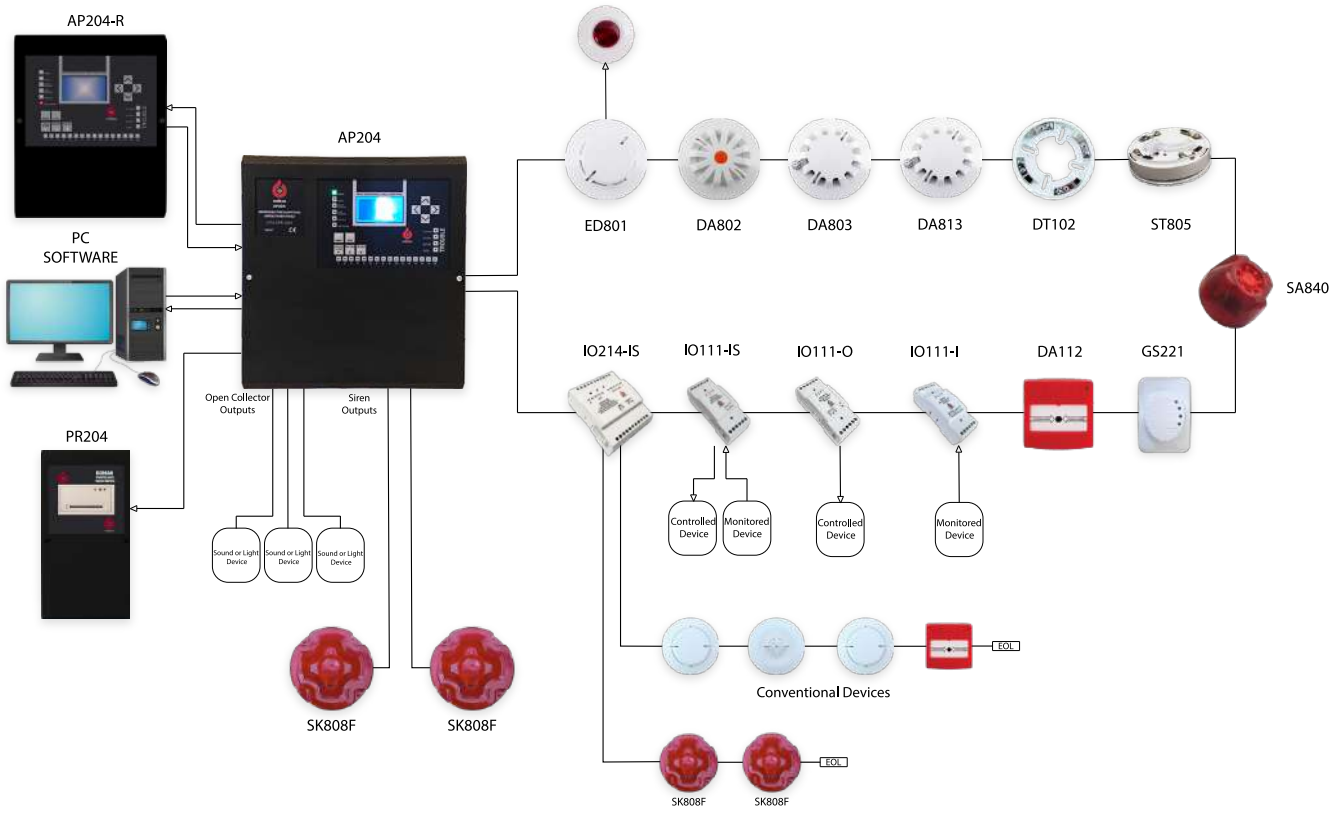


ENVIRONMENTAL SPECIFICATIONS	
OPERATING TEMPERATURE	-10 °C ≈ +55°C
HUMIDITY	%0 ≈ %95 Relative Humidity
ENVIRONMENTAL CATEGORY	IP21
PHYSICAL SPECIFICATIONS	
CASE MATERIAL	METAL CASE
DIMENSIONS (H x W x D)	36 x 34,5 x 10,5 cm
WEIGHT	5,4 Kg (without battery)

REDBAN
Fire and Gas Control Systems

S2 ADDRESSABLE FIRE DETECTION AND CONTROL SYSTEM SOLUTION 2

SCHEMATIC DIAGRAM



RELEATED DEVICES

Model	Device	Base Used			Indicator Output	Built in isolator
		DT102	DT202	Sounder Base		
DA801	Smoke Detector	✓	✓	✓	✓	-
DA802	Heat Detector	✓	✓	✓	✓	-
DA803	Combined Detector	✓	✓	✓	✓	-
DA813	Combined Detector with Built-in Isolator	✓	✓	✓	✓	✓
BA102	Manual Call Point	-	-	-	-	-
DA112	Manual Call Point with Built-in Isolator	-	-	-	-	✓
IO111	Input/Output Module	-	-	-	-	-
IO111-I	Input Module	-	-	-	-	-
IO111-O	Output Module	-	-	-	-	-
IO111-IS	Input/Output Module with Built-in Isolator	-	-	-	-	✓
IO111-I-IS	Input Module with Built-in Isolator	-	-	-	-	✓
IO111-O-IS	Output Module with Built-in Isolator	-	-	-	-	✓
IO214	Addressable Conventional Input&Supervised Siren Output Module	-	-	-	-	-
IO214-I	Addressable Conventional Input Module	-	-	-	-	-
IO214-O	Supervised Siren Output Module	-	-	-	-	-
IO214-IS	Addressable Conventional Input & Supervised Siren Output Module with Built-in Isolator	-	-	-	-	✓
IO214-I-IS	Addressable Conventional Input Module with Built-in Isolator	-	-	-	-	✓
IO214-O-IS	Supervised Siren Output Module with Built-in Isolator	-	-	-	-	✓
GS221	Methane & Buthane Gas Detector	-	-	-		-
SA840	Addressable Sounder with Flasher	✓	✓	-	✓	-

ACCESSORIES

AP204-R REPEATER PANEL



AP204-R repeater panel is a device specially designed for Solution 2. Data is exchanged between the panel and the repeater panel by RS485 communication. Thus, AP204-R Repeater panel can receive data from the main panel and display it on the LCD screen, and transfer the changes made in the menu to the main panel. It possesses the same control functions as the main panel and features a slim and stylish design, making it suitable for use in visible places.

PR204 PRINTER UNIT



The PR204 Printer unit is a device that allows for printing out the event log. It can be connected to all Redban panels via RS485. The event log, stored in the main panel memory, can be printed out.

RB1201 ADDRESS PROGRAMMER



Address Programmer is a device used to assign addresses to addressable devices (fire detection and carbon monoxide detection) and to set other desired features. Turkish and English language support allows users to perform operations according to their preferences. The RB1201 address programmer is portable and operates with 4 AAA batteries, making it suitable for fieldwork.

LK204-CD LOOP CARD



LK204-CD Loop Card is used to effectively connect and monitor devices in large facilities and fire safety systems. It serves as a reliable component with its high capacity, supervision capabilities and compatibility. LK204-CD is competible with AP204 panel and working on CDS2 protocole. Each loop card allows the connection of 250 devices and complies with loop A class.

REDBAN
Fire and Gas Control Systems

ED801, DA801, DA802, DA803, DA813
ADDRESSABLE DETECTORS



Solution 2 Addressable detector series is specially designed to detect smoke, heat or both caused by fire in the environment and transmit the detection information S2 panels on CDS2 protocole
All detectors are certified by EN54 standard, which is the European standard (EN54-5 for heat detector, EN54-7 for smoke detector and EN54-17 for short-circuit isolator).
The ED801 and DA801 smoke detectors are highly effective for reporting fires early by detecting smoke in slow-starting fires, thus preventing the fire from spreading. These smoke detector models share similar technical specifications. However, they differ in appearance.
The DA802 heat detector is class A1 heat detector. It detects temperature increases in the environment, indirectly preventing fires. Additionally, it can detect temperature increases in fires caused by explosions and react earlier than smoke detectors.
The DA803 combined detector combines both smoke and heat detection capabilities. This versatile detector is effective in detecting both slow-starting fires and fires that occur with explosions. Due to its dual functionality and effectiveness in high-risk areas, it is preferred over other detectors.
The DA813 combined detector shares the same specifications as the DA803, with the additional feature of a built-in isolator. This allows the DA813 to isolate the next part of the loop line in the event of a short circuit.

Features
- Robust and aesthetic PC/ABS case
- Microprocessor based design
- Double sided light path indicator
- Self calibration
- Eliminate false alarms
- Led indicator output
- Class A1 heat perception
- Programmable by RB1201 address programmer
- Programmable address information in nonvole tile memory
- EN54-5, EN54-7 & EN54-17 Certified

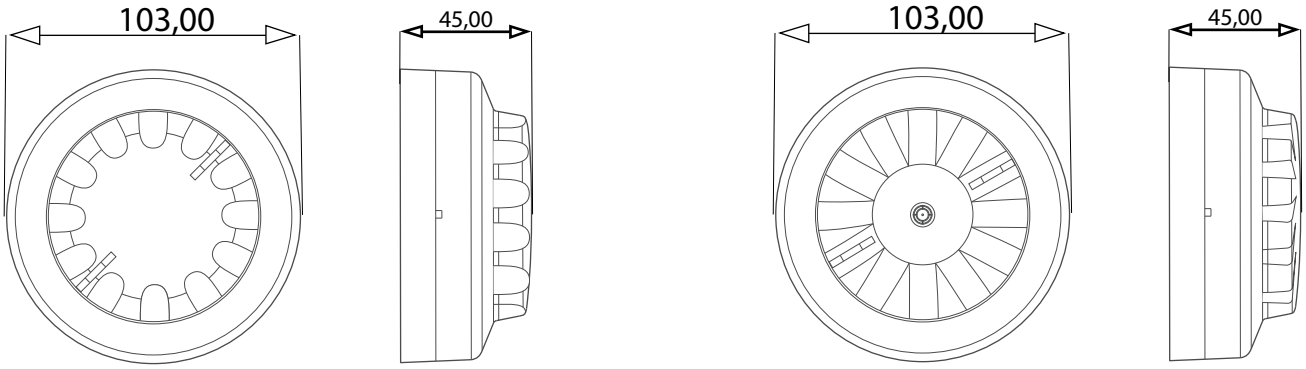
EN 54-5 EN 54-7 EN 54-17

EN54-5:2017 + EN54-7:2018 + EN54-17:2005
ED801 CPR No: 0370-CPR-3297
DA801 CPR No: 0370-CPR-3292
DA802 CPR No: 0370-CPR-3291
DA803 CPR No: 0370-CPR-3299
DA813 CPR No: 0370-CPR-3300

REDBAN
Fire and Gas Control Systems

TECHNICAL SPECIFICATIONS

	ED801/DA801	DA802	DA803/DA813
DESCRIPTION	Optical Smoke Detector	Heat Detector	Combined Detector
STANDARDS	EN54-7/17	EN54-5/17	EN54-5/7/17
LOOP OPERATING VOLTAGE	16 - 30 Vdc	16 - 30 Vdc	16 - 30 Vdc
LOOP OPERATING CURRENT	<200µA @ 24 Vdc	<200µA @ 24 Vdc	<200µA @ 24 Vdc
MAXIMUM ALARM CURRENT	<4 mA @ 24 VDC (LED on)	<4 mA @ 24 VDC (LED on)	<4 mA @ 24 VDC (LED on)
ADDRESSING MODE	Manual Addressing	Manual Addressing	Manual Addressing
SPECIFICATIONS			
SYSTEM WIRING	1,5 mm² 2 core loop	1,5 mm² 2 core loop	1,5 mm² 2 core loop
AREA COVERAGE	50 m²	50 m²	50 m²
MOUNTING POSITION	Ceiling Mount	Ceiling Mount	Ceiling Mount
MOUNTING BASES	DT102, DT202, ST805	DT102, DT202, ST805	DT102, DT202, ST805
HEAT CLASS	N/A	A1	N/A
INDICATION	360° visibily led indicator	360° visibily led indicator	360° visibily led indicator
SENSITIVITY	0,24 dB/m	N/A	0,24 dB/m
ISOLATOR SPECIFICATIONS			
ISOLATOR TYPE/SWITCH CURRENT	N/A	N/A	SSCS (A.3) / 230-400mA
ISOLATOR RECONNECT/LEAKAGE CURRENT	N/A	N/A	3-13mA / max. 18mA
STANDBY CURRENT/SERIAL RESISTANCE	N/A	N/A	max. 150uA / max. 1 ohm
ENVIRONMENTAL SPECIFICATIONS			
HUMIDITY	10% - 93% Relative Humidity	10% - 93% Relative Humidity	10% - 93% Relative Humidity
	Non-condensing	Non-condensing	Non-condensing
OPERATING TEMPERATURE	-10°C - 50°C	-10°C - 50°C	-10°C - 50°C
ENVIRONMENTAL CATEGORY	IP21	IP21	IP21
PHYSICAL SPECIFICATIONS			
CASE MATERIAL	PC/ABS Case	PC/ABS Case	PC/ABS Case
DIMENSIONS (H x D)	45 x 103 mm	45 x 103 mm	45 x 103 mm
WEIGHT	140 grams	140 grams	140 grams
COMPATIBILTY			
AP104 ADDRESSABLE FIRE PANEL	No	No	No
AP204 ADDRESSABLE FIRE PANEL	Yes	Yes	Yes
AP304 ADDRESSABLE FIRE PANEL	No	No	No



REDBAN
Fire and Gas Control Systems

GS221 ADDRESSABLE GAS DETECTOR





GS221 addressable gas detector is designed to detect gas leaks, to generate an alarm and to transmit this information to the control panel. GS221 addressable gas detector can worked with all Redban control panels. It can detect all kinds of flammable and combustible gases. The device detects gases such as Natural gas (methane), bottled gas (propane), LPG (Liquefied petroleum gas), CNG (natural gas).
When a gas leakage is detected, analog data is transmitted to the control panel over a communication line. Thanks to the relay output on it, it can be operated independent of the panel with only 24V supply. When GS221 detects while operating independent of the panel, the relay output active on it. In this way, a desired device (such as a gas valve) can be controlled. GS221 Gas detector is addressed by RB1201 Address programmer and this address information is stored in its permanent memory.

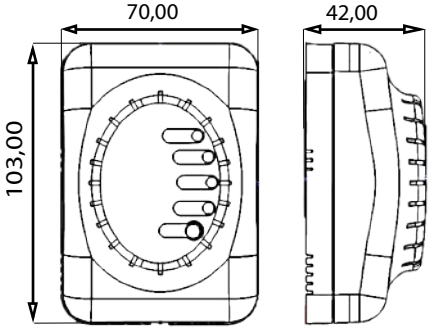
Features
- Robust and aesthetic PC/ABS case
- Microprocessor based design
- Light path indicator
- Test button
- NO / NC Relay output
- Programmable with RB1201 address programmer
- Address and data stored in nonvolatile memory
- Ability to work standalone
- EN 50194-1 standard

EN 50194-1

EN 50194-1:2009 + EN 60335-1:2020
EN 50270:2015 + EN 61000-6-3:2021
CoC No: 353

TECHNICAL SPECIFICATIONS

LOOP OPERATING VOLTAGE	16 - 30 Vdc
LOOP OPERATING CURRENT	<150µA @ 24 VDC (every 8 seconds with LED blink enabled)
MAXIMUM ALARM CURRENT	<7 mA @ 24 VDC (LED on)
ENVIRONMENTAL SPECIFICATIONS	
HUMIDITY	10% - 93% Relative Humidity, Non-condensing
OPERATING TEMPERATURE	-10°C - 50°C
SENSOR LIFE	5 Years
COVERAGE AREA	max. 50 m³



PHYSICAL SPECIFICATIONS	
CASE MATERIAL	PC/ABS Case
DIMENSIONS (H x W x D)	103 x 70 x 42 mm
WEIGHT	150 grams

REDBAN
Fire and Gas Control Systems

DETECTOR BASES

DT102 DETECTOR BASE



DT102 is used for assembling detectors and connecting cables. It is compatible with addressable Redban XX8xx series detectors, allowing for the use of different detector types in the same system. Additionally, it can be mounted on all surfaces.

DT202 DETECTOR BASE FOR SURFACE MOUNTING



DT202 is used for assembling detectors and connecting cables. It is compatible with addressable Redban XX8xx series detectors, allowing for the use of different detector types in the same system. It is suitable for use in areas with surface-mounted cabling.

ST805 SOUNDER BASE



ST805 Sounder Base is an important component of fire alarm systems. It adapts to various warning scenarios with its addressable and programmable features. It can effectively transmit emergency alerts with high volume and multi-device support. Additionally, its design requires no external power supply, simplifying installation. Up to 40 pieces of ST805 can be operated in one loop.

SUPPORTED DEVICES

ED801 Addressable Optical Smoke Detector
DA801 Addressable Optical Smoke Detector
DA802 Addressable Heat Detector
DA803 Addressable Combined Detector
DA813 Addressable Combined Detector with Built-in Isolator

REDBAN
Fire and Gas Control Systems

IO111-I, IO111-I-IS, IO111-O, IO111-O-IS, IO111, IO111-IS ADDRESSABLE INPUT/OUTPUT MODULE





The IO111/IO111-X-X Module series is designed to gather inputs from outside of the fire alarm system or provide output to control devices that indicate alarms or trigger any connected device within the system.

All modules are certified by EN54 standard, which is the European standard (EN54-18 for ınput/output module, EN54-17 for short-circuit isolator).

IO111-I or IO111-I-IS is used to connect devices from outside the system that need to be included. They can monitor the fault and alarm status of any device with relay contact. This capability allows devices that are not compatible with the fire panel to be added to the system.

IO111-O or IO111-O-IS can trigger any warning device in response to an alarm occurring in the fire alarm system. It is not affected by a power outage when changing relay direction.

IO111 or IO111-IS monitors the devices connected to its input and can control the desired devices as a result of an alarm. It can be programmed as an input-only, output-only, or both input and output module using the programming device.

Each module in the IO111-X-X module series is available in models with and without a built-in isolator.

Features

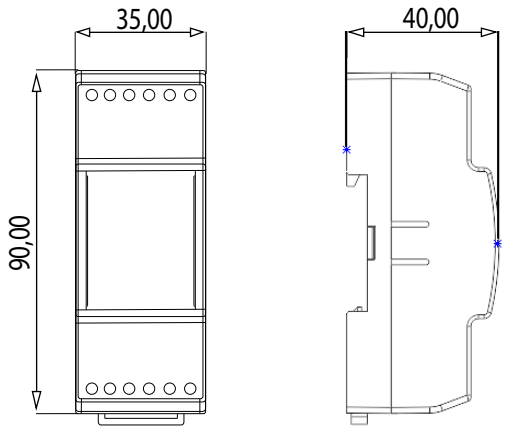
- Input/Output Module
- Smart Addressable RAAP Protocol
- Powered by the loop
- Programmable with RB1201
- Two indicator LEDs
- Built-in isolator
- Memory Relay Output
- Open Circuit, Short Circuit and Alarm Detection
- Rail Mount and Wall Mount
- EN54-18 & EN54-17 Certified

EN 54-18 EN 54-17

EN54-18:2005 + EN54-17:2005
CPR No: 1922-CPR-1948

TECHNICAL SPECIFICATIONS

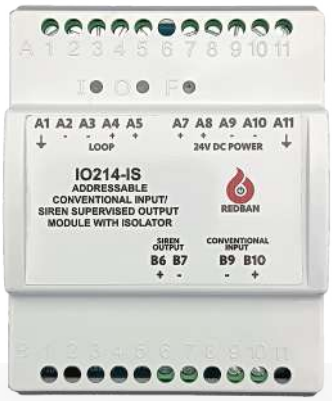
	IO111/IO111-IS	IO111-I/IO111-I-IS	IO111-O/IO111-O-IS
DESCRIPTION	Input/Output Module	Input Module	Output Module
STANDARDS	EN54-18/17	EN54-18/17	EN54-18/17
LOOP OPERATING VOLTAGE	16 - 30 Vdc	16 - 30 Vdc	16 - 30 Vdc
LOOP OPERATING CURRENT	<150µA @ 24 Vdc	<150µA @ 24 Vdc	<150µA @ 24 Vdc
MAXIMUM ALARM CURRENT	<12mA @ 24 Vdc (LED on)	<12 mA @ 24 Vdc (LED on)	<12 mA @ 24 Vdc (LED on)
RELAY CONTACT STRENGTH	300mA @ 24 Vdc	N/A	300mA @ 24 Vdc
SERIAL RESISTANCE	max. 1 Ohm	max. 1 Ohm	max. 1 Ohm
ADDRESSING MODE	Manuel Addressing	Manuel Addressing	Manuel Addressing
SPECIFICATIONS			
SYSTEM WIRING	Min. 0,8 mm² 2 core loop	Min. 0,8 mm² 2 core loop	Min. 0,8 mm² 2 core loop
MOUNTING POSITION	Wall Mount	Wall Mount	Wall Mount
MOUNTING OPTIONS	Surface Mount with Screw	Surface Mount with Screw	Surface Mount with Screw
	Rail Mount with Apparatus	Rail Mount with Apparatus	Rail Mount with Apparatus
ISOLATOR SPECIFICATIONS			
ISOLATOR TYPE/SWITCH CURRENT	SSCS (A.3) / 230-400mA	SSCS (A.3) / 230-400mA	SSCS (A.3) / 230-400mA
ISOLATOR RECONNECT/LEAKAGE CURRENT	3-13mA / max. 18mA	3-13mA / max. 18mA	3-13mA / max. 18mA
STANDBY CURRENT/SERIAL RESISTANCE	max. 150uA / max. 1 ohm	max. 150uA / max. 1 ohm	max. 150uA / max. 1 ohm
ENVIRONMENTAL SPECIFICATIONS			
HUMIDITY	10% - 93% Relative Humidity	10% - 93% Relative Humidity	10% - 93% Relative Humidity
	Non-condensing	Non-condensing	Non-condensing
OPERATING TEMPERATURE	-10°C - 50°C	-10°C - 50°C	-10°C - 50°C
ENVIRONMENTAL CATEGORY	IP21	IP21	IP21
COMPATIBILTY			
AP104 ADDRESSABLE FIRE PANEL	Yes	Yes	Yes
AP204 ADDRESSABLE FIRE PANEL	Yes	Yes	Yes
AP304 ADDRESSABLE FIRE PANEL	Yes	Yes	Yes



PHYSICAL SPECIFICATIONS	
CASE MATERIAL	PC/ABS Case
DIMENSIONS (H x W x D)	90 x 35 x 40 mm
WEIGHT	70 grams

REDBAN
Fire and Gas Control Systems

IO214, IO214-IS, IO214-I, IO214-I-IS, IO214-O, IO214-O-IS
ADDRESSABLE CONVENTIONAL INPUT
SUPERVISED SIREN OUTPUT





The IO214/IO214-X-X Module is designed to gather conventional inputs from outside of the fire alarm system or provide output to sounders that will indicate any alarms or trigger any sounder connected to the system.
All modules are certified by EN54 standard, which is the European standard (EN54-18 for ınput/output module, EN54-17 for short-circuit isolator).
IO214-I or IO214-I-IS is used to include conventional devices in the addressable system. They can operate 32 conventional devices each. This allows for the addition of more devices to the system with one address.
Output assignment can be made to IO214-O or IO214-O-IS according to the desired scenario. Based on this assignment, it can control a siren or any other device that operates with 24V.
IO214 or IO214-IS can work as both conventional input and supervised siren output. It can be programmed as an input-only, output-only, or both input and output module using the RB1201 address programmer.
Each module in the IO214-X-X module series is available in models with and without a built-in isolator.

Features
- Smart Addressable RAAP Protocol
- Conventional Input
- Supervised Siren Output
- Programmable with RB1201
- Three indicator LEDs
- Built-in isolator
- Open Circuit, Short Circuit and Alarm Detection
- Rail Mount and Wall Mount
- EN54-18 & EN54-17 Certified

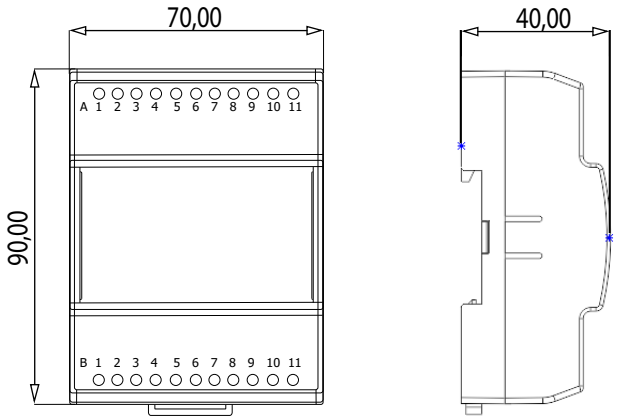
EN 54-18 EN 54-17

EN54-18:2005 + EN54-17:2005
CPR No: 1922-CPR-1949

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Fire and Gas Control Systems

TECHNICAL SPECIFICATIONS

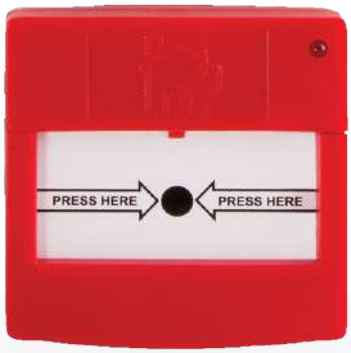
	IO214/IO214-IS	IO214-I/IO214-I-IS	IO214-O/IO214-O-IS
DESCRIPTION	Conventional Input / Supervised Siren Output	Conventional Input	Supervised Siren Output
STANDARDS	EN54-18/17	EN54-18/17	EN54-18/17
LOOP OPERATING VOLTAGE	16 - 30 Vdc	16 - 30 Vdc	16 - 30 Vdc
LOOP OPERATING CURRENT	<150µA @ 24 Vdc	<150µA @ 24 Vdc	<150µA @ 24 Vdc
MAXIMUM ALARM CURRENT	<12mA @ 24 Vdc (LED on)	<12 mA @ 24 Vdc (LED on)	<12 mA @ 24 Vdc (LED on)
RELAY CONTACT STRENGTH	300mA @ 24 Vdc	N/A	300mA @ 24 Vdc
SERIAL RESISTANCE	max. 1 Ohm	max. 1 Ohm	max. 1 Ohm
ADDRESSING MODE	Manuel Addressing	Manuel Addressing	Manuel Addressing
SPECIFICATIONS			
SYSTEM WIRING	Min. 0,8 mm² 2 core loop	Min. 0,8 mm² 2 core loop	Min. 0,8 mm² 2 core loop
MOUNTING POSITION	Wall Mount	Wall Mount	Wall Mount
MOUNTING OPTIONS	Surface Mount with Screw	Surface Mount with Screw	Surface Mount with Screw
	Rail Mount with Apparatus	Rail Mount with Apparatus	Rail Mount with Apparatus
ISOLATOR SPECIFICATIONS			
ISOLATOR TYPE/SWITCH CURRENT	SSCS (A.3) / 230-400mA	SSCS (A.3) / 230-400mA	SSCS (A.3) / 230-400mA
ISOLATOR RECONNECT/LEAKAGE CURRENT	3-13mA / max. 18mA	3-13mA / max. 18mA	3-13mA / max. 18mA
STANDBY CURRENT/SERIAL RESISTANCE	max. 150uA / max. 1 ohm	max. 150uA / max. 1 ohm	max. 150uA / max. 1 ohm
ENVIRONMENTAL SPECIFICATIONS			
HUMIDITY	10% - 93% Relative Humidity	10% - 93% Relative Humidity	10% - 93% Relative Humidity
	Non-condensing	Non-condensing	Non-condensing
OPERATING TEMPERATURE	-10°C - 50°C	-10°C - 50°C	-10°C - 50°C
ENVIRONMENTAL CATEGORY	IP21	IP21	IP21
COMPATIBILTY			
AP104 ADDRESSABLE FIRE PANEL	Yes	Yes	Yes
AP204 ADDRESSABLE FIRE PANEL	Yes	Yes	Yes
AP304 ADDRESSABLE FIRE PANEL	Yes	Yes	Yes



PHYSICAL SPECIFICATIONS	
CASE MATERIAL	PC/ABS Case
DIMENSIONS (H x W x D)	90 x 70 x 40 mm
WEIGHT	90 grams

REDBAN
Fire and Gas Control Systems

DA112 ADDRESSABLE MANUAL CALL POINT WITH BUILT-IN ISOLATOR



DA112 Addressable Resettable Manual Call Point with built-in isolator is designed for manual notification of fire or emergency situation in the addressable fire system. It can be activated by pressing the resettable plastic aparatus in front of it. An animated notification LED is present, and when the button is active, this LED stays constantly lit. After pressing the aparatus, it can be reset with special key. When the button is pressed and activated, it transmits the fire information to the control panel over the communication line. The address given to the MCP by the RB1201 Address Programmer is saved and stored in the memory. There is also a model without built-in ısolator as a BA102.

Features

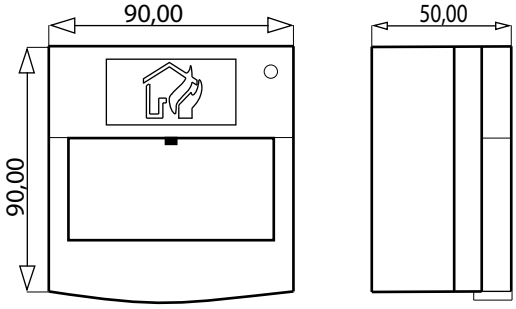
- Robust and aesthetic PC/ABS casee
- Programmable address information in nonvolati le memory
- Programmable with RB1201 Address programmer
- Led indicator
- Resettable with special key
- EN54-11 & EN54-17 certified

EN54-11:2001 + EN54-17:2005

DA112 CPR No: 0370-CPR-3301

BA102 CPR No: 0370-CPR-3293

TECHNICAL SPECIFICATIONS	
LOOP OPERATING VOLTAGE	16 - 30 Vdc
LOOP OPERATING CURRENT	<200µA @ 24 VDC (every 8 seconds with LED blink enabled)
MAXIMUM ALARM CURRENT	<7 mA @ 24 VDC (LED on)
ISOLATOR SPECIFICATIONS	
ISOLATOR TYPE/SWITCH CURRENT	SSCS (A.3) / 230-400mA
ISOLATOR RECONNECT/LEAKAGE CURRENT	3-13mA / max. 18mA
STANDBY CURRENT/SERIAL RESISTANCE	max. 150uA / max. 1 ohm
ENVIRONMENTAL SPECIFICATIONS	
HUMIDITY	10% - 93% Relative Humidity, Non-condensing
OPERATING TEMPERATURE	-10°C - 50°C



PHYSICAL SPECIFICATIONS	
CASE MATERIAL	PC/ABS Case
DIMENSIONS (H x W x D)	90 x 90 x 50 mm
WEIGHT	120 grams

REDBAN
Fire and Gas Control Systems

SA840 ADDRESSABLE FIRE ALARM SIREN





The SA840 Addressable Indoor Siren is designed for audio/visual warning in an addressable system. It is ideal for providing warnings in fire and security applications of buildings such as hotels and residences during emergency situations. The SA840 emits a loud warning to ensure prompt evacuation of building occupants. SA840 series sirens can be connected by the loop in the addressable fire alarm system. Any address between 1 and 250 can be assigned to the siren. Upon activation, the SA840 initiates an auditory alert. It also provides a visual alert with a red indicator. These indicators have a 360° field of view. The device can be reset by de-energizing the power supply.

Features

- Robust and aesthetic ABS plastic case
- Transparent red color
- visual warning led and flash
- 95 dB sound intensity at 1 meter (max. 105dB)
- Loop powered
- Programmable with RB1201 address programmer
- Programmable address information in nonvolatile memory
- EN54-3 Certified

EN 54-3

EN54-3:2001

CPR No: 1922-CPR-2167

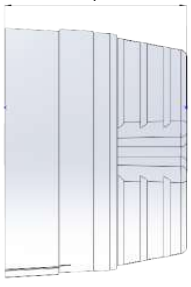
TECHNICAL SPECIFICATIONS

LOOP OPERATING VOLTAGE	16 - 30 Vdc
LOOP OPERATING CURRENT	<200µA @ 24 VDC (every 8 seconds with LED blink enabled)
MAXIMUM ALARM CURRENT	<30 mA @ 24 VDC (LED on)
SOUND INTENSITY	95 dB nom. (max. 105 dB)
ISOLATOR SPECIFICATIONS	
ISOLATOR TYPE/SWITCH CURRENT	SSCS (A.3) / 230-400mA
ISOLATOR RECONNECT/LEAKAGE CURRENT	3-13mA / max. 18mA
STANDBY CURRENT/SERIAL RESISTANCE	max. 150uA / max. 1 ohm
ENVIRONMENTAL SPECIFICATIONS	
HUMIDITY	10% - 93% Relative Humidity, Non-condensing
OPERATING TEMPERATURE	-10°C - 50°C

106,00



78,00



PHYSICAL SPECIFICATIONS	
CASE MATERIAL	PC/ABS Case
DIMENSIONS (H x D)	78 x 106 mm
WEIGHT	140 grams

REDBAN
Fire and Gas Control Systems





REDBAN

Fire and Gas Control Systems



ADDRESSABLE FIRE DETECTION AND CONTROL SYSTEM

SOLUTION 3

AP304 ADDRESSABLE FIRE ALARM CONTROL PANEL



REDBAN

S3

SOLUTION 3

EN 54-2 EN 54-4

EN54-2:1997 + EN54-4:1997

CPR No: 1922-CPR-1946

REDBAN AP304 Addressable Fire Alarm Panel is a high specification intelligent addressable control panel which is working on RAAP protocole.

These panels combine sophisticated functionality with simple operation and an aesthetically pleasing design and suitable for surface or recessed mounting with metal case.

This panel comes with a modular design and can be supplied in 1, 2 and 4 loop versions. Each loop can supervise 200 devices. In totally 800 devices can be controlled by the panel. AP304 has a networkable structure. In this way, 32 panels can be networked each other.

The user interface has 128x64 graphic lcd display, function buttons and indicator leds. On the device there are seperate indicator leds for 32 different zones; Trouble leds, Sound and Alarm indicators, Power, Ready, By-pass indicator leds as described in EN54-2/4 European Norm. All the system conditions are displayed on the central via seperate indicator leds as well. The central supervises system troubles, conditions and displays to the user. By the Reset, Alarm, Cancel Alarm, Silence, Test and Evacuate buttons, user can perform simply the system functions. The general system indicators: Power, Ready, Prealarm, Fire Alarm, Cancel Alarm, Silence and Evacuate indicator leds are displayed on the lefthand of central and the Trouble indicator leds are Ac Loss, Battery Error and Siren. Error are displayed in the righthand on the central.

The REDBAN AP304 Addressable Fire Alarm Panel is an interactive digital addressable fire detection and alarm system ideally suited for small and medium sized buildings such as residential buildings, shops, hotels, warehouses and offices.

The control panel is designed, manufactured and tested to fully meet the requirements of EN 54 part 2 and part 4. Especially designed PY100 software is available for configuring the panel and can be downloaded / uploaded to the system via onboard USB connection.

Simple and flexible installation, comissioning, configuring makes Redban systems the preferred fire alam system. User-friendly programming and robust operation are the goals of AP304.

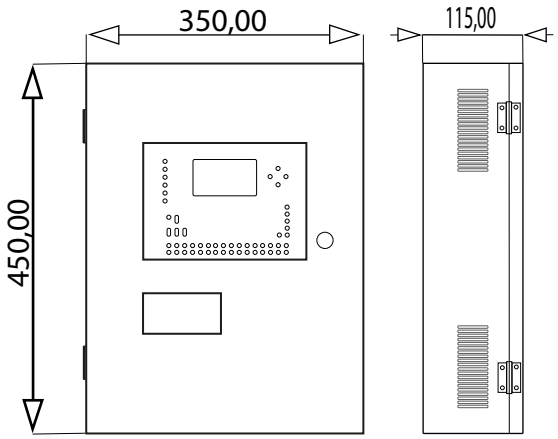
Features

- Available in 1-4 loop versions
- Robust and aesthetic Metal Case
- 32 panels can be networked each other
- Programmable 250 zones/32 zone leds
- 128x64 LCD screen
- 20 character zone & device names
- Intelligent addressable RAAP protocol
- Configuration and control software
- User friendly programming
- Flexible scenario
- Onboard USB & 2 RS485 interface
- Day&Night mode delays per zone
- Turkish & English language
- Real time clock
- 65000 Event log with time stamp
- EN54-2 & EN54-4 Certified



REDBAN
Fire and Gas Control Systems

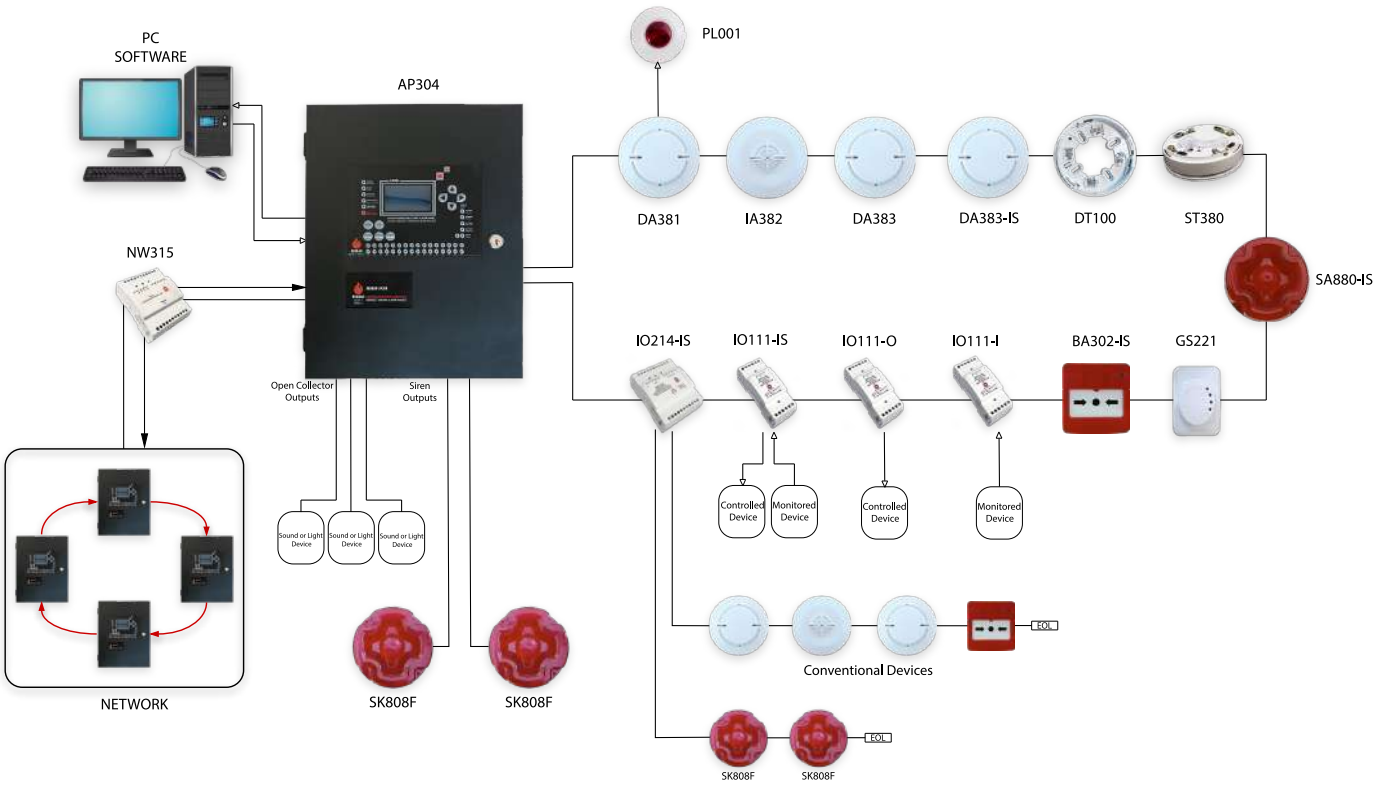
TECHNICAL SPECIFICATIONS	AP304-1	AP304-2	AP304-4
OPERATING VOLTAGE	180-240 Vac	180-240 Vac	180-240 Vac
POWER CONSUMPTION	100 Watt	100 Watt	100 Watt
NUMBER OF LOOP	1	1-2	1-4
NUMBER OF DEVICES IN THE LOOP	250	250	250
MAXIMUM NUMBER OF DEVICES OF THE PANEL	250	500	1000
LOOP CURRENT	230 mA	230 mA	230 mA
LOOP LOAD	120 Ω	120 Ω	120 Ω
BATTERY TYPE	Sealed Lead Acid Battery	Sealed Lead Acid Battery	Sealed Lead Acid Battery
BATTERY CAPACITY	2 X12V 7Ah	2 X12V 7Ah	2 X12V 7Ah
BATTERY SHORT-CIRCUIT PROTECTION	Yes	Yes	Yes
NETWORK	Yes	Yes	Yes
NUMBER OF PANELS IN THE NW SYSTEM	32	32	32
SIREN SUPERVISED OUTPUTS	2	2	2
OUTPUT TYPE	Relay N.Open Contact	Relay N.Open Contact	Relay N.Open Contact
CONTACT STRENGTH	2A @ 30V DC	2A @ 30V DC	2A @ 30V DC
FUSE	400 mA, Auto Reset	400 mA, Auto Reset	400 mA, Auto Reset
OUTPUT VOLTAGE	27,6 Vdc	27,6 Vdc	27,6 Vdc
END OF LINE RESISTANCE	6.8 K Ω 1/4 Watt	6.8 K Ω 1/4 Watt	6.8 K Ω 1/4 watt
GENERAL PURPOSE OUTPUTS	3	3	3
OUTPUT TYPE	Open Collector	Open Collector	Open Collector
OUTPUT CURRENT	50 mA	50 mA	50 mA
ALARM RELAY OUTPUT			
OUTPUT TYPE	N.Open (NO), N.Closed (NC)	N.Open (NO), N.Closed (NC)	N.Open (NO), N.Closed(NC)
CONTACT STRENGTH	2 A @ 30 v DC	2 A @ 30 v DC	2 A @ 30 v DC
ERROR RELAY OUTPUT			
OUTPUT TYPE	N.Open (NO), N.Closed (NC)	N.Open (NO), N.Closed (NC)	N.Open (NO), N.Closed (NC)
CONTACT STRENGTH	2 A @ 30 v DC	2 A @ 30 v DC	2 A @ 30 v DC
24V DC PROTECTED VOLTAGE OUTPUT	Yes	Yes	Yes
OUTPUT CURRENT	400 mA, Resettable Fused	400 mA, Resettable Fused	400 mA, Resettable Fused
24V DC NOT PROTECTED VOLTAGE OUTPUT	Yes	Yes	Yes
OUTPUT CURRENT	2A (Unfused)	2A (Unfused)	2A (Unfused)
SERIAL DATA INTERFACE (USB - RS485)	1-2	1-2	1-2
BAUDRATE	9600 BPS	9600 BPS	9600 BPS
DATA BITS	8	8	8
PARITY BIT	None	None	None
STOP BIT	1	1	1
FLOW CONTROL	None	None	None
DATA RETENTION	10 Year	10 Year	10 Year
GK120 POWER SUPPLY (Parameters)			
Battery Resistance	400 mΩ	400 mΩ	400 mΩ
EN54-4 Test Parameters Imin, Imaxa, Imaxb	27mA, 1.5A, 1.8A	27mA, 1.5A, 1.8A	27mA, 1.5A, 1.8A



ENVIRONMENTAL SPECIFICATIONS	
OPERATING TEMPERATURE	-10 °C ≈ +55°C
HUMIDITY	%0 ≈ %95 Relative Humidity
ENVIRONMENTAL CATEGORY	IP21
PHYSICAL SPECIFICATIONS	
CASE MATERIAL	METAL CASE
DIMENSIONS (H x W x D)	45 x 35 x 11,5 cm
WEIGHT	6,7 Kg (without battery)

REDBAN
Fire and Gas Control Systems

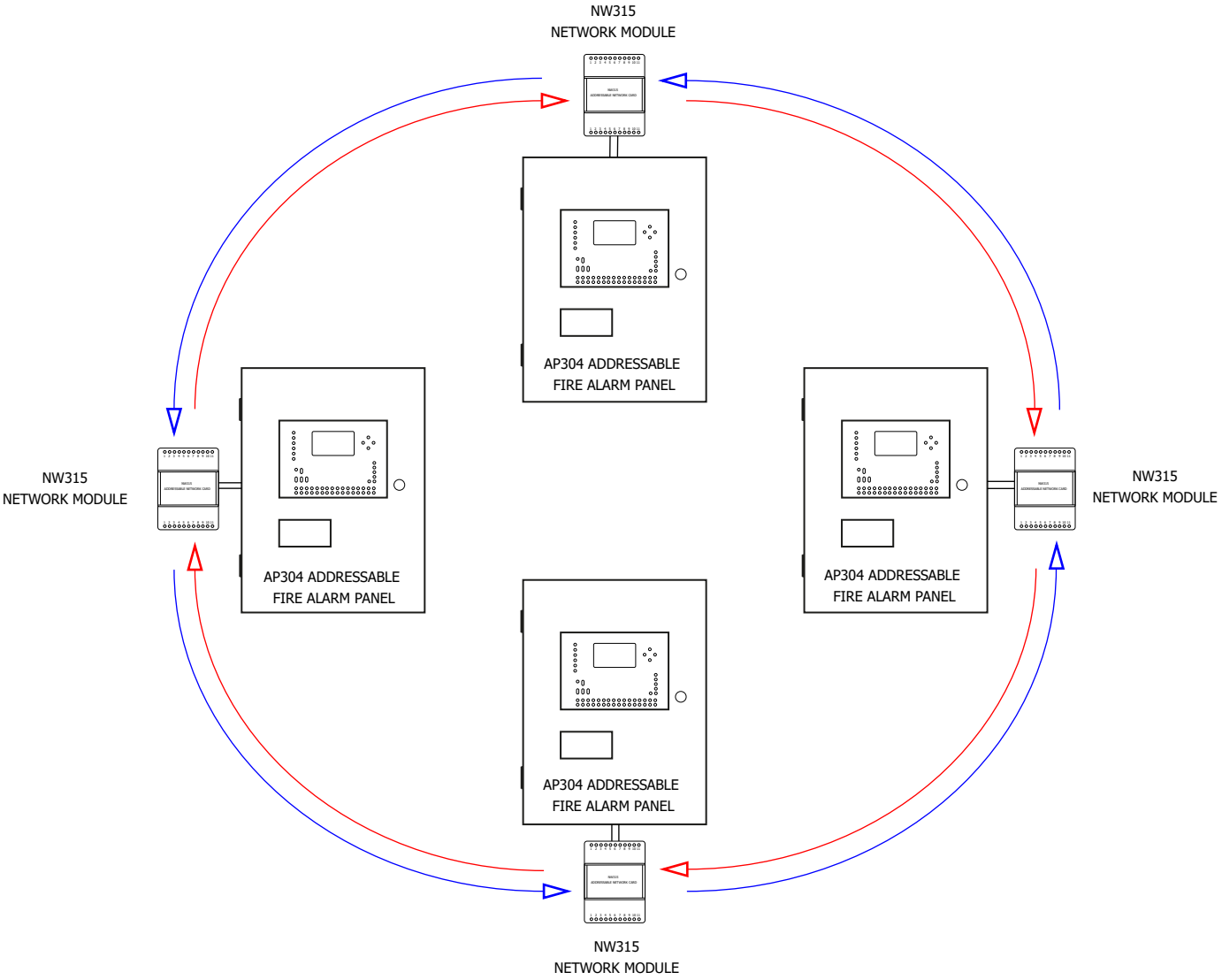
SCHEMATIC DIAGRAM



RELEATED DEVICES

Model	Device	Base Used			Indicator Output	Built-in Isolator
		DT100	DT200	Sounder Base		
DA381	Smoke Detector	✓	✓	✓	✓	-
DA381-IS	Smoke Detector with Built-in Isolator	✓	✓	✓	✓	✓
DA382	Heat Detector	✓	✓	✓	✓	-
DA382-IS	Heat Detector with Built-in Isolator	✓	✓	✓	✓	✓
DA383	Combined Detector	✓	✓	✓	✓	-
DA383-IS	Combined Detector with Built-in Isolator	✓	✓	✓	✓	✓
BA302	Manual Call Point	-	-	-	-	-
BA302-IS	Manual Call Point with Built-in Isolator	-	-	-	-	✓
IO111	Input/Output Module	-	-	-	-	-
IO111-I	Input Module	-	-	-	-	-
IO111-O	Output Module	-	-	-	-	-
IO111-IS	Input/Output Module with Built-in Isolator	-	-	-	-	✓
IO111-I-IS	Input Module with Built-in Isolator	-	-	-	-	✓
IO111-O-IS	Output Module with Built-in Isolator	-	-	-	-	✓
IO214	Addressable Conventional Input/Siren Supervised Output Module	-	-	-	-	-
IO214-I	Addressable Conventional Input Module	-	-	-	-	-
IO214-O	Siren Supervised Output Module	-	-	-	-	-
IO214-IS	Addressable Conventional Input/ Siren Supervised Output Module with Built-in Isolator	-	-	-	-	✓
IO214-I-IS	Addressable Conventional Input Module with Built-in Isolator	-	-	-	-	✓
IO214-O-IS	Siren Supervised Output Module with Built-in Isolato	-	-	-	-	✓
GS221	Methane/Butane Gas Detector	-	-	-	-	-
SA880	Addressable Sounder with Flasher	✓	✓	-	-	-
SA880-IS	Addressable Sounder with Flasher with Built-in Isolator	✓	✓	-	-	✓

NETWORK DIAGRAM



	Network Capacity	NW Distance (RS485)	NW Distance (FIBER)	Receive	Transmite
NW315	16 Panels	1000 mt.(peer to peer)	20000 mt.(peer to peer)	Yes	Yes
NW316	32 Panels	1000 mt.(peer to peer)	20000 mt.(peer to peer)	Yes	Yes
NW317	64 Panels	1000 mt.(peer to peer)	20000 mt.(peer to peer)	Yes	Yes

When you want to create a network system with AP304 panels, an NW31x network module must be used for each panel. These modules can be mounted into the AP304 panels because the panels have a modular structure. Panels communicate with RS485 protocole. Using the converter, data transfer can also be made via Fiberoptic or TCP/IP. As seen in the table above, the module to be used varies depending on the number of panels to be networked.

KY200 MONITORING AND CONTROL SOFTWARE

KY200 monitoring and control software is compatible with all redban panels. The sketch in the software is created in different ways depending on the project used. The connection between the panel and the computer is made via RS485. If there is a fiber optic substructure or TCP/IP substructure in the area where the system is installed, data transfer can be provided by these methods by using a converter. The software interface consists of 5 different windows. These are building top view, building front view, floor view, camera and data traffic list. These windows become active when an alarm occurs. If there is more than one building, the building top view shows which building an alarm occurred. The building front view shows which floor the alarm is located on. Floor view shows which area of the floor the alarm is located on. The area can be monitored instantly with a camera installed in that area. All alarms and errors occurring on the panel can be monitored from the data traffic list. These windows can be viewed separately on 5 different monitors, or they can be viewed by opening 5 windows on a single monitor.



PY100 CONFIGURATION SOFTWARE

The configuration software is compatible with all redban panels. It is possible to edit all devices connected to the fire detection system with this software. The scenario is created by retrieval the data on the panel by the software, and then the edited data is loaded back into the panel. In this way, device names, exit assignments, creating virtual zones, etc. can be done more easily and quickly.



ACCESSORIES

LK204-RB LOOP CARD



LK204-RB Loop Card is used to effectively connect and monitor devices in large facilities and fire safety systems. It serves as a reliable device with its high capacity, supervision capabilities and compatibility. LK204-RB is competible with AP104 and AP304 panels. Each loop card allows the connection of 200 devices and complies with loop A class operation.

RB1201 ADDRESS PROGRAMMER



Address Programmer is a device used to assign addresses to addressable devices (fire detection and carbon monoxide detection) and to set other desired features. Turkish and English language support allows to perform operations according to users preferences. RB1201 address programmer is a portable device and works with 4 AAA batteries in order to use in field survey.

PL001 INDICATOR LED



PL001 is red, wide light emitting indicator for use with conventional and addressable detectors. The device indicates if the detector is in alarm condition where the detectors can not be seen.

BK-01 MCP PROTECTIVE COVER



Protective cover is used to prevent unnecessary or accidental activation of Manual Call Point. Seal can be used with the apparatus attached to the body. It is made of robust plastic material. Therefore it is resistant to impacts.

DA381, DA381-IS, DA382, IA382, DA382-IS, DA383, DA383-IS ADDRESSABLE DETECTORS





XA38x Addressable detector series are specially designed to detect smoke, heat or both caused by fire in the environment and transmit the detection information to Redban control panels.
The detector features a plug-in type photoelectic smoke sensor and thermistor with addressable analog communications. The sensor transmits an analog representation of smoke density and heat rise over a communication line to a control panel. Inside MCU's EEPROM, the sensor's address is stored and can be set by a portable address setting device called RB1201 Device Programmer. The detector can be assigned an address ID ranging from 1 to 200.
The DA383-IS Model is similar to the DA383 detector, but with the addition of an isolator built into the DA383. The built-in isolator enables part of the communications loop to continue operating in the event of a short circuit The module will automatically restore the entire communications loop to the normal condition when the short circuit is removed.
The smoke perception part or the heat perception of the detector can be disabled either by the device programmer or through program settings from the panel.
DA381 (Smoke Detector), DA382 (Heat Detector), and DA383 (Combined Detector) models are available, with built-in isolators implemented in DA381-IS, DA382-IS, and DA383-IS variants.
The heat detector side (DA382 & IA382) is Class A1 (EN54-5) heat detector.
Upon activation, The DA383 illuminates two red indicator through light guides, situated on the detector head.

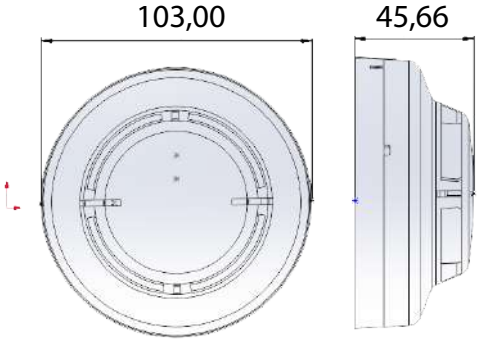
Features
- Robust and aesthetic PC/ABS case
- Microprocessor based design
- Double sided light path indicator
- Self calibration
- Eliminate false alarms
- Built-in Isolator
- Led indicator output
- Class A1 Heat Perception
- Programmable by RB1201 address programmer
- Address and data stored in nonvolatile memory
- EN54-5, EN54-7 & EN54-17 Certified

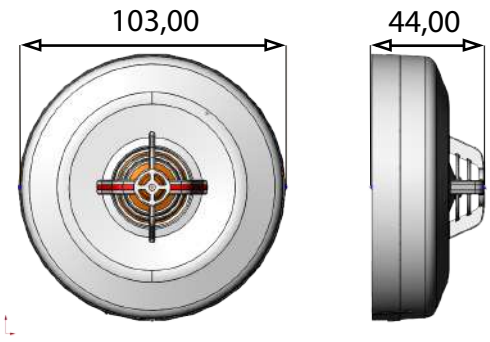
EN54-5:2017 + EN54-7:2018 + EN54-17:2005
CPR No: 1922-CPR-2166



TECHNICAL SPECIFICATIONS

	DA381/DA381-IS	IA382/DA382/DA382-IS	DA383/DA383-IS
DESCRIPTION	Optical Smoke Detector	Heat Detector	Combined Detector
STANDARDS	EN54-7/17	EN54-5/17	EN54-5/7/17
LOOP OPERATING VOLTAGE	16 - 30 Vdc	16 - 30 Vdc	16 - 30 Vdc
LOOP OPERATING CURRENT	<200µA @ 24 Vdc	<200µA @ 24 Vdc	<200µA @ 24 Vdc
MAXIMUM ALARM CURRENT	<4 mA @ 24 VDC (LED on)	<4 mA @ 24 VDC (LED on)	<4 mA @ 24 VDC (LED on)
ADDRESSING MODE	Manual Addressing	Manual Addressing	Manual Addressing
SPECIFICATIONS			
SYSTEM WIRING	1,5 mm² 2 core loop	1,5 mm² 2 core loop	1,5 mm² 2 core loop
AREA COVERAGE	50 m²	50 m²	50 m²
MOUNTING POSITION	Ceiling Mount	Ceiling Mount	Ceiling Mount
MOUNTING BASES	DT100, DT200, ST380	DT100, DT200, ST380	DT100, DT200, ST380
HEAT CLASS	N/A	Class A1	Class A1
INDICATION	360° visibily led indicator	360° visibily led indicator	360° visibily led indicator
SENSITIVITY	0,23 dB/m	N/A	0,23 dB/m
ISOLATOR SPECIFICATIONS			
ISOLATOR TYPE/SWITCH CURRENT	SSCS (A.3) / 230-400mA	SSCS (A.3) / 230-400mA	SSCS (A.3) / 230-400mA
ISOLATOR RECONNECT/LEAKAGE CURRENT	3-13mA / max. 18mA	3-13mA / max. 18mA	3-13mA / max. 18mA
STANDBY CURRENT/SERIAL RESISTANCE	max. 150uA / max. 1 ohm	max. 150uA / max. 1 ohm	max. 150uA / max. 1 ohm
ENVIRONMENTAL SPECIFICATIONS			
HUMIDITY	10% - 93% Relative Humidity	10% - 93% Relative Humidity	10% - 93% Relative Humidity
	Non-condensing	Non-condensing	Non-condensing
OPERATING TEMPERATURE	-10°C - 50°C	-10°C - 50°C	-10°C - 50°C
ENVIRONMENTAL CATEGORY	IP21	IP21	IP21
COMPATIBILTY			
AP104 ADDRESSABLE FIRE PANEL	Yes	Yes	Yes
AP204 ADDRESSABLE FIRE PANEL	No	No	No
AP304 ADDRESSABLE FIRE PANEL	Yes	Yes	Yes
PHYSICAL SPECIFICATIONS			
CASE MATERIAL	PC/ABS Case	PC/ABS Case	PC/ABS Case
DIMENSIONS (H x D)	45,6 x 103 mm	44 / 45,6 x 103 mm	45,6 x 103 mm





REDBAN
Fire and Gas Control Systems

GS221 ADDRESSABLE GAS DETECTOR





GS221 addressable gas detector is designed to detect gas leaks, to generate an alarm and to transmit this information to the control panel. GS221 addressable gas detector can worked with all Redban control panels. It can detect all kinds of flammable and combustible gases. The device detects gases such as Natural gas (methane), bottled gas (propane), LPG (Liquefied petroleum gas), CNG (natural gas).
When a gas leakage is detected, analog data is transmitted to the control panel over a communication line. Thanks to the relay output on it, it can be operated independent of the panel with only 24V supply. When GS221 detects while operating independent of the panel, the relay output active on it. In this way, a desired device (such as a gas valve) can be controlled. GS221 Gas detector is addressed by RB1201 Address programmer and this address information is stored in its permanent memory.

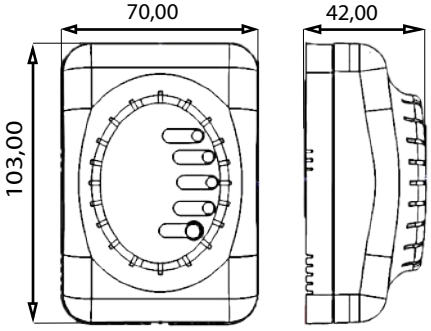
Features
- Robust and aesthetic PC/ABS case
- Microprocessor based design
- Light path indicator
- Test button
- NO / NC Relay output
- Programmable with RB1201 address programmer
- Address and data stored in nonvolatile memory
- Ability to work standalone
- EN 50194-1 standard

EN 50194-1

EN 50194-1:2009 + EN 60335-1:2020
EN 50270:2015 + EN 61000-6-3:2021
CoC No: 353

TECHNICAL SPECIFICATIONS

LOOP OPERATING VOLTAGE	16 - 30 Vdc
LOOP OPERATING CURRENT	<150µA @ 24 VDC (every 8 seconds with LED blink enabled)
MAXIMUM ALARM CURRENT	<7 mA @ 24 VDC (LED on)
ENVIRONMENTAL SPECIFICATIONS	
HUMIDITY	10% - 93% Relative Humidity, Non-condensing
OPERATING TEMPERATURE	-10°C - 50°C
SENSOR LIFE	5 Years
COVERAGE AREA	max. 50 m³

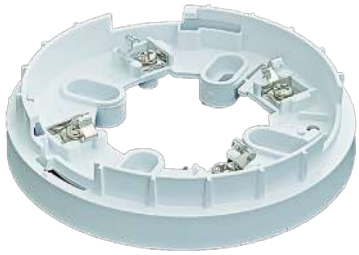


PHYSICAL SPECIFICATIONS	
CASE MATERIAL	PC/ABS Case
DIMENSIONS (H x W x D)	103 x 70 x 42 mm
WEIGHT	150 grams

REDBAN
Fire and Gas Control Systems

DETECTOR BASES

DT100 DETECTOR BASE



DT100 is used to assemble detectors and to connect cables. It works compatible with addressable Redban XX38x series detectors, so you can use different detector types in the same system. It can be mounted on all surfaces.

DT200 DETECTOR BASE FOR SURFACE MOUNTİNG



DT200 is used to assemble detectors and to connect cables. It works compatible with both addressable Redban XX38x detectors, so you can use different detector types in the same system. It is suitable for use in areas with surface-mounted cabling.

ST380 SOUNDER BASE



ST380 Sounder Base is an important component of fire alarm systems. It adapts to various warning scenarios with its addressable and programmable features. It can effectively transmit emergency alerts with high volume and multi-device support. Additionally, its design requires no external power supply, making installation simple. 40 pieces of ST380 can be operated in one loop.

SUPPORTED DEVICES

DA381 Addressable Optical Smoke Detector
DA382 Addressable Heat Detector
IA382 Addressable Heat Detector
DA383 Addressable Combined Detector
DA381-IS Addressable Optical Smoke Detector with Built-in Isolator
DA382-IS Addressable Heat Detector with Built-in Isolator
DA383-IS Addressable Combined Detector with Built-in Isolator

IO111-I, IO111-I-IS, IO111-O, IO111-O-IS, IO111, IO111-IS ADDRESSABLE INPUT/OUTPUT MODULE





IO111/IO111-X-X Module series is designed for the gather inputs from outside of the fire alarm system or give output to control the devices that will indicate any alarms or trigger any device connected to the system.
All modules are certified by EN54 standard that is European standard (EN54-18 for ınput/output module, EN54-17 for short-circuit isolator).
IO111-I or IO111-I-IS is used to connect devices that want to be included in the system from outside. IO111-I or IO111-I-IS can monitor the fault and alarm status of any device with relay contact. In this way, devices that are not compatible with the fire panel can also be added to the system.
IO111-O or IO111-O-IS can trigger any warning device as a result of an alarm occurring in the fire alarm system. It is not affected by a power out when it changes relay direction.
IO111 or IO111-IS monitors the devices connected to its input and can control the desired devices as a result of the alarm. It can be programmed as only input, only output and both input and output modules with the programming device.
Each modules in the IO111-X-X module series is available in models with and without built-in isolator.

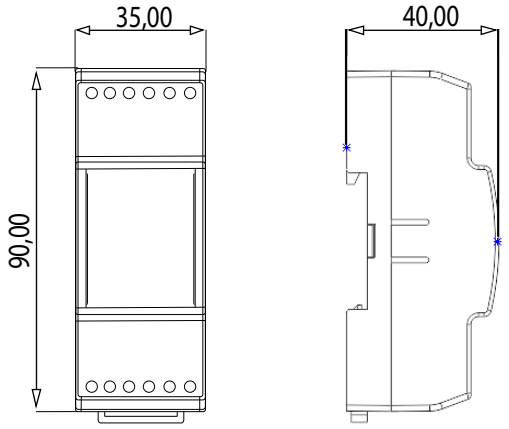
Features
- Input/Output Module
- Smart Addressable RAAP Protocol
- Powered by the loop
- Programmable with RB1201
- Two indicator LEDs
- Built-in isolator
- Memory Relay Output
- Open Circuit, Short Circuit and Alarm Detection
- Rail Mount and Wall Mount
- EN54-18 & EN54-17 Certified

EN 54-18 EN 54-17

EN54-18:2005 + EN54-17:2005
CPR No: 1922-CPR-1948

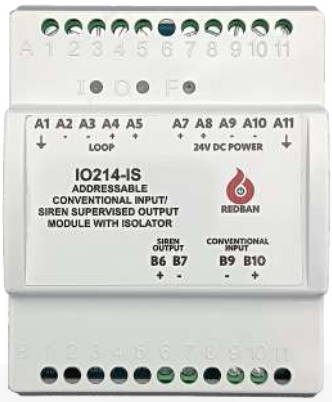
TECHNICAL SPECIFICATIONS

	IO111/IO111-IS	IO111-I/IO111-I-IS	IO111-O/IO111-O-IS
DESCRIPTION	Input/Output Module	Input Module	Output Module
STANDARDS	EN54-18/17	EN54-18/17	EN54-18/17
LOOP OPERATING VOLTAGE	16 - 30 Vdc	16 - 30 Vdc	16 - 30 Vdc
LOOP OPERATING CURRENT	<150µA @ 24 Vdc	<150µA @ 24 Vdc	<150µA @ 24 Vdc
MAXIMUM ALARM CURRENT	<12mA @ 24 Vdc (LED on)	<12 mA @ 24 Vdc (LED on)	<12 mA @ 24 Vdc (LED on)
RELAY CONTACT STRENGTH	300mA @ 24 Vdc	N/A	300mA @ 24 Vdc
SERIAL RESISTANCE	max. 1 Ohm	max. 1 Ohm	max. 1 Ohm
ADDRESSING MODE	Manuel Addressing	Manuel Addressing	Manuel Addressing
SPECIFICATIONS			
SYSTEM WIRING	Min. 0,8 mm² 2 core loop	Min. 0,8 mm² 2 core loop	Min. 0,8 mm² 2 core loop
MOUNTING POSITION	Wall Mount	Wall Mount	Wall Mount
MOUNTING OPTIONS	Surface Mount with Screw	Surface Mount with Screw	Surface Mount with Screw
	Rail Mount with Apparatus	Rail Mount with Apparatus	Rail Mount with Apparatus
ISOLATOR SPECIFICATIONS			
ISOLATOR TYPE/SWITCH CURRENT	SSCS (A.3) / 230-400mA	SSCS (A.3) / 230-400mA	SSCS (A.3) / 230-400mA
ISOLATOR RECONNECT/LEAKAGE CURRENT	3-13mA / max. 18mA	3-13mA / max. 18mA	3-13mA / max. 18mA
STANDBY CURRENT/SERIAL RESISTANCE	max. 150uA / max. 1 ohm	max. 150uA / max. 1 ohm	max. 150uA / max. 1 ohm
ENVIRONMENTAL SPECIFICATIONS			
HUMIDITY	10% - 93% Relative Humidity	10% - 93% Relative Humidity	10% - 93% Relative Humidity
	Non-condensing	Non-condensing	Non-condensing
OPERATING TEMPERATURE	-10°C - 50°C	-10°C - 50°C	-10°C - 50°C
ENVIRONMENTAL CATEGORY	IP21	IP21	IP21
COMPATIBILTY			
AP104 ADDRESSABLE FIRE PANEL	Yes	Yes	Yes
AP204 ADDRESSABLE FIRE PANEL	Yes	Yes	Yes
AP304 ADDRESSABLE FIRE PANEL	Yes	Yes	Yes



PHYSICAL SPECIFICATIONS	
CASE MATERIAL	PC/ABS Case
DIMENSIONS (H x W x D)	90 x 35 x 40 mm
WEIGHT	70 grams

IO214, IO214-IS, IO214-I, IO214-I-IS, IO214-O, IO214-O-IS
ADDRESSABLE CONVENTİONAL INPUT
SUPERVISED SIREN OUTPUT





The IO214/IO214-X-X Module is designed to gather conventional inputs from outside of the fire alarm system or provide output to sounders that will indicate any alarms or trigger any sounder connected to the system.
All modules are certified by EN54 standard, which is the European standard (EN54-18 for ınput/output module, EN54-17 for short-circuit isolator).
IO214-I or IO214-I-IS is used to include conventional devices in the addressable system. They can operate 32 conventional devices each. This allows for the addition of more devices to the system with one address.
Output assignment can be made to IO214-O or IO214-O-IS according to the desired scenario. Based on this assignment, it can control a siren or any other device that operates with 24V.
IO214 or IO214-IS can work as both conventional input and supervised siren output. It can be programmed as an input-only, output-only, or both input and output module using the RB1201 address programmer.
Each module in the IO214-X-X module series is available in models with and without a built-in isolator.

Features
- Smart Addressable RAAP Protocol
- Conventional Input
- Supervised Siren Output
- Programmable with RB1201
- Three indicator LEDs
- Built-in isolator
- Open Circuit, Short Circuit and Alarm Detection
- Rail Mount and Wall Mount
- EN54-18 & EN54-17 Certified

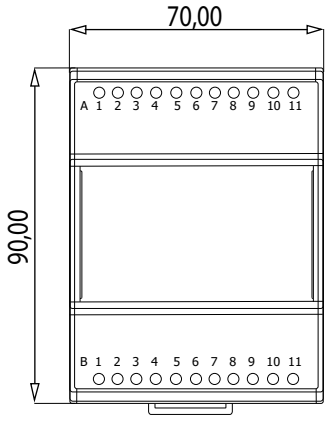
EN 54-18 EN 54-17

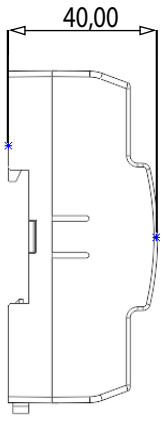
EN54-18:2005 + EN54-17:2005
CPR No: 1922-CPR-1949

REDBAN
Fire and Gas Control Systems

TECHNICAL SPECIFICATIONS

	IO214/IO214-IS	IO214-I/IO214-I-IS	IO214-O/IO214-O-IS
DESCRIPTION	Conventional Input / Supervised Siren Output	Conventional Input	Supervised Siren Output
STANDARDS	EN54-18/17	EN54-18/17	EN54-18/17
LOOP OPERATING VOLTAGE	16 - 30 Vdc	16 - 30 Vdc	16 - 30 Vdc
LOOP OPERATING CURRENT	<150µA @ 24 Vdc	<150µA @ 24 Vdc	<150µA @ 24 Vdc
MAXIMUM ALARM CURRENT	<12mA @ 24 Vdc (LED on)	<12 mA @ 24 Vdc (LED on)	<12 mA @ 24 Vdc (LED on)
RELAY CONTACT STRENGTH	300mA @ 24 Vdc	N/A	300mA @ 24 Vdc
SERIAL RESISTANCE	max. 1 Ohm	max. 1 Ohm	max. 1 Ohm
ADDRESSING MODE	Manuel Addressing	Manuel Addressing	Manuel Addressing
SPECIFICATIONS			
SYSTEM WIRING	Min. 0,8 mm² 2 core loop	Min. 0,8 mm² 2 core loop	Min. 0,8 mm² 2 core loop
MOUNTING POSITION	Wall Mount	Wall Mount	Wall Mount
MOUNTING OPTIONS	Surface Mount with Screw	Surface Mount with Screw	Surface Mount with Screw
	Rail Mount with Apparatus	Rail Mount with Apparatus	Rail Mount with Apparatus
ISOLATOR SPECIFICATIONS			
ISOLATOR TYPE/SWITCH CURRENT	SSCS (A.3) / 230-400mA	SSCS (A.3) / 230-400mA	SSCS (A.3) / 230-400mA
ISOLATOR RECONNECT/LEAKAGE CURRENT	3-13mA / max. 18mA	3-13mA / max. 18mA	3-13mA / max. 18mA
STANDBY CURRENT/SERIAL RESISTANCE	max. 150uA / max. 1 ohm	max. 150uA / max. 1 ohm	max. 150uA / max. 1 ohm
ENVIRONMENTAL SPECIFICATIONS			
HUMIDITY	10% - 93% Relative Humidity Non-condensing	10% - 93% Relative Humidity Non-condensing	10% - 93% Relative Humidity Non-condensing
OPERATING TEMPERATURE	-10°C - 50°C	-10°C - 50°C	-10°C - 50°C
ENVIRONMENTAL CATEGORY	IP21	IP21	IP21
COMPATIBILTY			
AP104 ADDRESSABLE FIRE PANEL	Yes	Yes	Yes
AP204 ADDRESSABLE FIRE PANEL	Yes	Yes	Yes
AP304 ADDRESSABLE FIRE PANEL	Yes	Yes	Yes





PHYSICAL SPECIFICATIONS	
CASE MATERIAL	PC/ABS Case
DIMENSIONS (H x W x D)	90 x 70 x 40 mm
WEIGHT	90 grams

BA302-IS ADDRESSABLE MANUAL CALL POINT WITH BUILT-IN ISOLATOR





BA302-IS Addressable Resettable Manual Call Point with built-in isolator is designed for manual notification of fire or emergency situation in the addressable fire system. It can be activated by pressing the resettable plastic aparatus in front of it. An animated notification LED is present, and when the button is active, this LED stays constantly lit. After pressing the aparatus, it can be reset with special key. When the button is pressed and activated, it transmits the fire information to the control panel over the communication line. The address given to the MCP by the RB1201 Address Programmer is saved and stored in the memory. There is also a model without built-in ısolator as BA302.

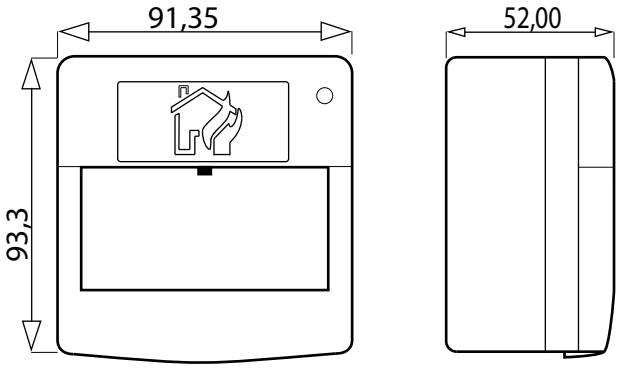
Features

- Robust and aesthetic PC/ABS case
- Programmable address information in nonvola tile memory
- Programmable with RB1201 Address programmer
- Led indicator
- Resettable with special key
- Competible with EN54-11 & EN54-17

EN54-11:2001 + EN54-17:2005

TECHNICAL SPECIFICATIONS

LOOP OPERATING VOLTAGE	16 - 30 Vdc
LOOP OPERATING CURRENT	<150µA @ 24 VDC (every 8 seconds with LED blink enabled)
MAXIMUM ALARM CURRENT	<4 mA @ 24 VDC (LED on)
ISOLATOR SPECIFICATIONS	
ISOLATOR TYPE/SWITCH CURRENT	SSCS (A.3) / 230-400mA
ISOLATOR RECONNECT/LEAKAGE CURRENT	3-13mA / max. 18mA
STANDBY CURRENT/SERIAL RESISTANCE	max. 150uA / max. 1 ohm
ENVIRONMENTAL SPECIFICATIONS	
HUMIDITY	10% - 93% Relative Humidity, Non-condensing
OPERATING TEMPERATURE	-10°C - 50°C



PHYSICAL SPECIFICATIONS	
CASE MATERIAL	PC/ABS Case
DIMENSIONS (H x W x D)	93,3 x 91,35 x 52 mm
WEIGHT	120 grams

REDBAN
Fire and Gas Control Systems

SA880-IS ADDRESSABLE FIRE ALARM SIREN WITH BUILT-IN ISOLATOR





SA880-IS Addressable Indoor Siren is designed for audio/visual warning in addressable system. SA880-IS is ideal for providing warning in fire and security applications of buildings such as hotels and residences in emergency situations. It makes a loud warning to ensure the evacuation of building occupants. SA880-IS series sirens can be connected by the loop in the addressable fire alarm system. In addition, in case of a short circuit in the loop line, it isolates the next part of the loop line by the internal isolator. Any address between 1 and 250 can be assigned to the siren. Upon activation, the SA880-IS initiates an auditory alert and also provides a visual alert with a red indicator and a white flash. These indicators have a 360° field of view. The device can be reset by de-energizing the power supply.

Features

- Robust and aesthetic ABS plastic case
- Transparent red color
- visual warning led and flash
- 86 dB sound intensity at 1 meter (nom.)
- Loop powered
- Programmable with RB1201 address programmer
- Programmable address information in nonvolatile memory
- EN54-3 & EN54-17 Certified

EN 54-3 EN 54-17

EN54-3:2001 + EN54-17:2005

CPR No: 1922-CPR-2167

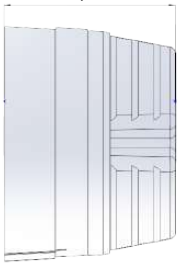
TECHNICAL SPECIFICATIONS

LOOP OPERATING VOLTAGE	16 - 30 Vdc
LOOP OPERATING CURRENT	<150µA @ 24 VDC (every 8 seconds with LED blink enabled)
MAXIMUM ALARM CURRENT	<30 mA @ 24 VDC (LED on)
SOUND INTENSITY	86 dB nom. (max. 105 dB)
ISOLATOR SPECIFICATIONS	
ISOLATOR TYPE/SWITCH CURRENT	SSCS (A.3) / 230-400mA
ISOLATOR RECONNECT/LEAKAGE CURRENT	3-13mA / max. 18mA
STANDBY CURRENT/SERIAL RESISTANCE	max. 150uA / max. 1 ohm
ENVIRONMENTAL SPECIFICATIONS	
HUMIDITY	10% - 93% Relative Humidity, Non-condensing
OPERATING TEMPERATURE	-10°C - 50°C

106,00



78,00



PHYSICAL SPECIFICATIONS	
CASE MATERIAL	PC/ABS Case
DIMENSIONS (H x D)	78 x 106 mm
WEIGHT	140 grams

REDBAN
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REDBAN

Fire and Gas Control Systems



ADDRESSABLE CARBONMONOXIDE DETECTION AND CONTROL SYSTEM

CO-016 CARBONMONOXIDE CONTROL PANEL



CO-016 Addressable Carbon Monoxide Detection and Control Panel is the control unit of the carbon monoxide system and works as a Scada system with the CO540 Carbon Monoxide detector.

The CO-016 Carbon Monoxide Control Panel is designed to process the measurement data from the CO 540 detectors and to perform three-level control according to the scenario created. It can provide three different controls according to the gas levels detected in the detectors. The threshold values for these gas levels are set during installation (can be changed later). When the first 2 threshold values are exceeded, the fans are activated and if it is possible to evacuate the gas in the environment, the system returns to normal position without going into the alarm state. If the 3rd level threshold is exceeded, the control panel goes into the alarm state and stays in this position until reset. In this way, it provides the opportunity to prevent the gas in the environment before it reaches critical levels.

The CO-016 Carbon Monoxide Control Panel communicates with the Redban Addressable Advanced Protocol (RAAP). In this way, it instantly collects measurement data from devices. In addition, the calibration of the devices can be set by the panel. It can operate 80 devices, 48 of which are detectors, in one cycle. It can be increased up to 4 loops and a total of 320 devices can be connected to these loops. There are 2 supervised siren outputs, 3 open collector outputs, alarm and fault relay outputs and 2 24V supply outputs as protected and unprotected on the motherboard. Devices to be included in the system from outside can be supplied from these outputs, considering the current and voltage values.

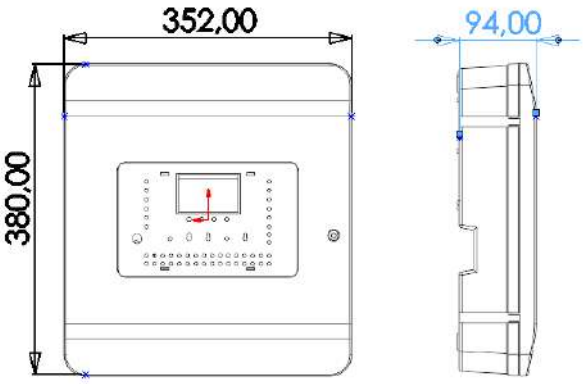
Features

- IP30 robust and aesthetic PC/ABS case
- Microprocessor based design
- Production with SMT technology
- 16 Programmable Zones
- All threshold levels can be programmed separately for each zone
- Intelligent interactive communication with Redban RAAP protocol
- Define 3 threshold levels for each zone
- Average or Peak value selection
- Continuous supervision of all detectors and modules
- Gas levels can be continuously monitored
- 2 level indicator LEDs for each zone



REDBAN
Fire and Gas Control Systems

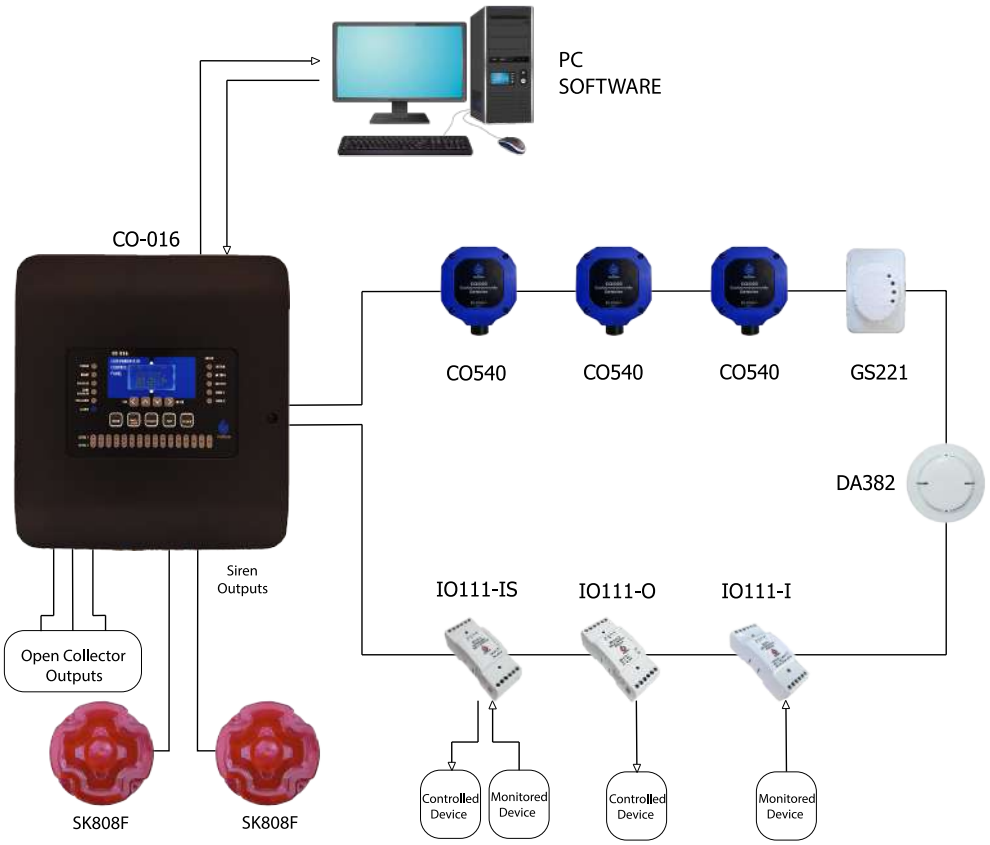
TECHNICAL SPECIFICATIONS	CO-016
OPERATING VOLTAGE	180-240 Vac
POWER CONSUMPTION	100 Watt
NUMBER OF LOOP	1
NUMBER OF DEVICES IN THE LOOP	80
MAXIMUM NUMBER OF DEVICES OF THE PANEL	320
LOOP CURRENT	230 mA
LOOP LOAD	120 Ω
NETWORK OPERATING	No
BATTERY TYPE	Sealed Lead Acid Battery
BATTERY CAPACITY	2 X12V 7Ah
BATTERY SHORT-CIRCUIT PROTECTION	Yes
SIREN SUPERVISED OUTPUTS	1
OUTPUT TYPE	Relay N.Open Contact
CONTACT STRENGTH	2A @ 30V DC
FUSE	400 mA, Auto Reset
OUTPUT VOLTAGE	27,6 Vdc
END OF LINE RESISTANCE	6.8 K Ω 1/4 Watt
GENERAL PURPOSE OUTPUTS	3
OUTPUT TYPE	Open Collector
OUTPUT CURRENT	50 mA
ALARM RELAY OUTPUT	
OUTPUT TYPE	N.Open (NO), N.Closed (NC)
CONTACT STRENGTH	2 A @ 30 v DC
ERROR RELAY OUTPUT	
OUTPUT TYPE	N.Open (NO), N.Closed (NC)
CONTACT STRENGTH	2 A @ 30 v DC
24V DC PROTECTED VOLTAGE OUTPUT	Yes
OUTPUT CURRENT	400 mA, Resettable Fused
24V DC NOT PROTECTED VOLTAGE OUTPUT	Yes
OUTPUT CURRENT	2A (Unfused)
SERIAL DATA INTERFACE (USB - RS485)	1-2
BAUDRATE	9600 BPS
DATA BITS	8
PARITY BIT	None
STOP BIT	1
FLOW CONTROL	None
DATA RETENTION	10 Year
GK120 POWER SUPPLY (Parameters)	
Battery Resistance	400 mΩ
EN54-4 Test Parameters Imin, Imaxa, Imaxb	27mA, 1.5A, 1.8A



ENVIRONMENTAL SPECIFICATIONS	
OPERATING TEMPERATURE	-10 °C ≈ +55°C
HUMIDITY	%0 ≈ %95 Relative Humidity
ENVIRONMENTAL CATEGORY	IP21
PHYSICAL SPECIFICATIONS	
CASE MATERIAL	PC/ABS Case
DIMENSIONS (H x W x D)	38 x 35,2 x 9,4 cm
WEIGHT	2,6 Kg (without battery)

REDBAN
Fire and Gas Control Systems

SCHEMATIC DIAGRAM



SYSTEM WORKING

Carbonmonoxide system is an addressable system. In this way desired devices can be assigned to a zone with virtual zoning. In addition to the carbonmonoxide detector, natural gas detector and heat detector can also be used in the addressable carbon monoxide system. In addition to carbon monoxide detectors, such detectors are needed in car parks and tunnels in case of a leak in LPG-powered vehicles or to detect temperature increases in batteries in electric vehicles, which have become very common today. Additionally, it is possible to include any desired device with relay into the system with monitoring modules.

CO540 ADDRESSABLE CARBONMONOXIDE DETECTOR





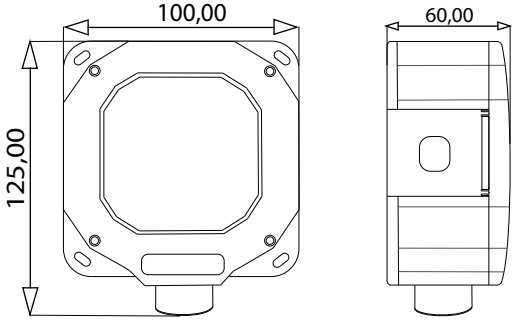
CO540 Addressable Carbon Monoxide Detector is the main component of the Carbon monoxide control system and works together with the CO-016 Control panel as a Scada system.
CO540 Carbon Monoxide detectors are designed to detect gas leaks according to the density level in areas such as car parks and tunnels and to report these density levels to the CO-016 Carbon Monoxide Control Panel. The system is designed to detect gas leaks, evaluate and operate ventilation fans and other warning devices at predetermined levels.
Thanks to its microprocessor-controlled design, the CO540 Carbon Monoxide detector can measure with a sensitivity of 2 ppm. The device communicates with the control panel by a single 2-wire cable, it does not need an extra supply cable.

Features
- IP54 robust and aesthetic ABS plastic case
- Microprocessor based design
- Production with SMT technology
- Sensitive measurement with 10-bit analog-to-digital conversion
- 0 - 300 ppm measuring range
- Intelligent interactive communication with Redban RAAP protocol
- Programmable address and calibration information in permanent memory
- Programmable with RB1201 programmer
- No external power required
- Calibration mask
- Competible with EN 50545-1

EN 50545-1:2012

TECHNICAL SPECIFICATIONS

LOOP OPERATING VOLTAGE	16 - 30 Vdc
LOOP OPERATING CURRENT	<1,2 mA @24 Vdc (every 8 seconds with LED blink enabled)
MAXIMUM ALARM CURRENT	<6 mA @ 24 VDC (LED on)
CALIBRATION & THRESHOLD VALUES	Set by the CO-016 Control Panel
RELAY CURRENT STRENGTH	200 mA @24 Vdc
ENVIRONMENTAL SPECIFICATIONS	
HUMIDITY	10% - 93% Relative Humidity, Non-condensing
OPERATING TEMPERATURE	-10°C - 50°C
ENVIRONMENTAL CLASS	IP54



PHYSICAL SPECIFICATIONS	
CASE MATERIAL	PC/ABS Case
DIMENSIONS (H x W x D)	125 x 100 x 60 mm
WEIGHT	180 grams

REDBAN
Fire and Gas Control Systems

IO111-I, IO111-I-IS, IO111-O, IO111-O-IS, IO111, IO111-IS
ADDRESSABLE INPUT/OUTPUT MODULE





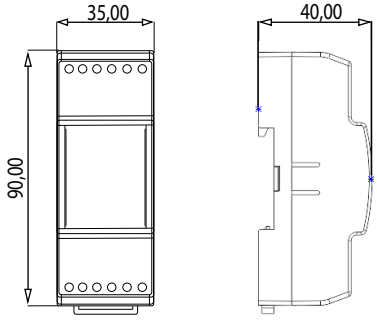
IO111/IO111-X-X Module series is designed for the gather inputs from outside of the carbonmonoxide system or give output to control the devices that will indicate any alarms or trigger any device connected to the system.
All modules are certified by EN54 standard that is European standard (EN54-18 for ınput/output module, EN54-17 for short-circuit isolator).
Each modules in the IO111-X-X module series is available in models with and without built-in isolator.

Features
- Input/Output Module
- Smart Addressable RAAP Protocol
- Powered by the loop
- Programmable with RB1201
- Two indicator LEDs
- Memory Relay Output
- Open Circuit, Short Circuit and Alarm Detection
- Rail Mount and Wall Mount
- EN54-18 & EN54-17 Certified

EN54-18:2005 + EN54-17:2005
CPR No: 1922-CPR-1948

TECHNICAL SPECIFICATIONS

LOOP OPERATING VOLTAGE	16 - 30 Vdc
LOOP OPERATING CURRENT	<150 uA @24 Vdc (every 8 seconds with LED blink enabled)
MAXIMUM ALARM CURRENT	<7 mA @ 24 VDC (LED on)
RELAY CURRENT STRENGTH	300 mA @24 Vdc
SERIAL RESISTANCE	Max. 1 ohm
ENVIRONMENTAL SPECIFICATIONS	
HUMIDITY	10% - 93% Relative Humidity, Non-condensing
OPERATING TEMPERATURE	-10°C - 50°C



PHYSICAL SPECIFICATIONS

CASE MATERIAL	PC/ABS Case
DIMENSIONS (H x W x D)	90 x 35 x 40 mm
WEIGHT	70 grams

REDBAN
Fire and Gas Control Systems





REDBAN

Fire and Gas Control Systems



CONVENTIONAL FIRE ALARM SYSTEM

KP304, KP308, KP316 CONVENTIONAL FIRE ALARM PANELS



KP3xx Conventional fire alarm panel series are designed according to the latest technology in microprocessor based devices. 20 detectors (excluding button) can be connected to each zone. There are alarm relay output, error relay output and siren output on the panel mainboard. KP3xx also has a 24V output. If an external device is desired to be controlled from the relay outputs, 24V output can be used as a supply. KP3xx conventional fire alarm panel is produced with SMD Technology. These panels are EN 54-2/4 certified and can work compatible with all detectors and devices that comply with EN54 standards.

KP304 has 4 zones. 20 detectors (excluding buttons) can be connected to each zone. In total, 80 detectors can be operated in one panel.

KP308 has 8 zones. 20 detectors (excluding buttons) can be connected to each zone. In total, 160 detectors can be operated in one panel.

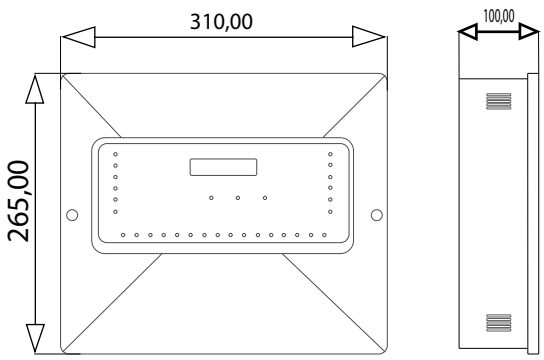
KP316 has 16 zones. 20 detectors (excluding buttons) can be connected to each zone. In total, 320 detectors can be operated in one panel.

Features

- Robust and aesthetic metal case
- Plastic front body
- 4, 8, 16 Zone Options
- Zone names can be written
- Real time clock
- Event Memory
- Turkish & English language support
- Alarm & error relay outputs
- 24V Auxiliary supply output
- EN54-2 & EN54-4 certified

EN54-2:1997 + EN54-4:1997
CPR No: 0370-CPR-3290

TECHNICAL SPECIFICATIONS	KP304	KP308	KP316
OPERATING VOLTAGE	180-240 V ac	180-240 V ac	180-240 V ac
POWER CONSUMPTION	100 W max.	100 W max.	100 W max.
BATTERY TYPE	Lead-Acid Sealed Battery	Lead-Acid Sealed Battery	Lead-Acid Sealed Battery
BATTERY CAPACITY	2 x 12V/7Ah	2 x 12V/7Ah	2 x 12V/7Ah
BATTERY SHORT-CIRCUIT PROTECTION	Yes	Yes	Yes
ZONE CAPACITY	4	8	16
ACTIVE DETECTOR			
CAPACITY PER ZONE	20 Pieces/Zone	20 Pieces/Zone	20 Pieces/Zone
MAXIMUM LOAD PER ZONE	120R	120R	120R
PASSIVE DETECTOR			
CAPACITY PER ZONE	Unlimited	Unlimited	Unlimited
END OF LINE RESISTANCE	6.8 KOhm(6.8K-20K)	6.8 KOhm(6.8K-20K)	6.8 KOhm(6.8K-20K)
SIREN SUPERVISED OUTPUT			
OUTPUT TYPE	Relay N.Open Contact	Relay N.Open Contact	Relay N.Open Contact
CONTACT STRENGTH	2 A @ 30 V dc	2 A @ 30 V dc	2 A @ 30 V dc
FUSE	400 mA Automatic Reset	400 mA Automatic Reset	400 mA Automatic Reset
MAXIMUM VOLTAGE	30V	30V	30V
ALARM RELAY OUTPUT			
OUTPUT TYPE	N.Open (NO), N.Closed (NC)	N.Open (NO), N.Closed (NC)	N.Open (NO), N.Closed (NC)
CONTACT STRENGTH	2 A @ 30 V dc	2 A @ 30 V dc	2 A @ 30 V dc
ERROR RELAY OUTPUT			
OUTPUT TYPE	N.Open (NO), N.Closed (NC)	N.Open (NO), N.Closed (NC)	N.Open (NO), N.Closed (NC)
CONTACT STRENGTH	2 A @ 30 V dc	2 A @ 30 V dc	2 A @ 30 V dc
24V DC PROTECTED VOLTAGE OUTPUT	Yes	Yes	Yes
OUTPUT CURRENT	400 mA, Resettable Fused	400 mA, Resettable Fused	400 mA, Resettable Fused
24V DC NOT PROTECTED VOLTAGE OUTPUT	Yes	Yes	Yes
OUTPUT CURRENT	2A (Unfused)	2A (Unfused)	2A (Unfused)
GK120 POWER SUPPLY (Parameters)			
Battery Resistance	400 mΩ	400 mΩ	400 mΩ
EN54-4 Test Parameters Imin, Imaxa, Imaxb	27mA, 1.5A, 1.8A	27mA, 1.5A, 1.8A	27mA, 1.5A, 1.8A



ENVIRONMENTAL SPECIFICATIONS	
OPERATING TEMPERATURE	-10 °C ≈ +55°C
HUMIDITY	%0 ≈ %95 Relative Humidity
ENVIRONMENTAL CATEGORY	IP30
PHYSICAL SPECIFICATIONS	
CASE MATERIAL	Metal & PC/ABS
DIMENSIONS (H x W x D)	265 x 310 x 100 mm
WEIGHT	1,6 Kg (without battery)

REDBAN
Fire and Gas Control Systems

KP102, KP105, KP305 CONVENTIONAL FIRE ALARM PANELS





KP1xx Conventional fire alarm panels are designed according to the latest technology in microprocessor based devices. 20 detectors (excluding MCP) can be connected to each zone. There are alarm relay output, error relay output and two supervised siren outputs on the panel mainboard. KP1xx conventional fire alarm panels are produced with SMT Technology. These panels are competible with EN 54-2/4 and can work compatible with all detectors and devices that comply with EN54 standards.

There are 2 and 5 zones models in the KP1xx panel series. In total, 40 or 100 detectors can be operated in one panel. KP1xx is very advantageous for small systems due to its compact structure and competitive price.

KP102 has 2 zones and can operate 20 detectors in each zone, 40 detectors in total (excluding fire buttons).

KP105 has 5 zones and can operate 20 detectors in each zone, 100 detectors in total (excluding fire buttons).

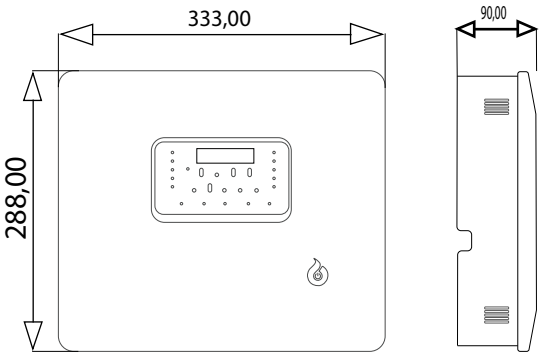
KP305 panel series has an LCD screen. In this way, zone names and required settings can be made easily.

Features

- Userfriendly Programming
- Robust and aesthetic PC/ABS case
- 2 and 5 Zones
- 2 Supervised Siren Outputs
- Acces Levels
- Alarm & error relay outputs
- 2x16 LCD Display (KP305)
- EN54-2 & EN54-4 competible



TECHNICAL SPECIFICATIONS	KP102	KP105/KP305
OPERATING VOLTAGE	180-240 V ac	180-240 V ac
POWER CONSUMPTION	100 W max.	100 W max.
BATTERY TYPE	Lead-Acid Sealed Battery	Lead-Acid Sealed Battery
BATTERY CAPACITY	2 x 12V/7Ah	2 x 12V/7Ah
BATTERY SHORT-CIRCUIT PROTECTION	Yes	Yes
ZONE CAPACITY	2	5
ACTIVE DETECTOR		
CAPACITY PER ZONE	20 Pieces/Zone	20 Pieces/Zone
MAXIMUM LOAD PER ZONE	120R	120R
PASSIVE DETECTOR		
CAPACITY PER ZONE	Unlimited	Unlimited
END OF LINE RESISTANCE	6.8 KOhm(6.8K-20K)	6.8 KOhm(6.8K-20K)
SIREN SUPERVISED OUTPUT		
OUTPUT TYPE	Relay N.Open Contact	Relay N.Open Contact
CONTACT STRENGTH	2 A @ 30 V dc	2 A @ 30 V dc
FUSE	400 mA Automatic Reset	400 mA Automatic Reset
MAXIMUM VOLTAGE	30V	30V
ALARM RELAY OUTPUT		
OUTPUT TYPE	N.Open (NO), N.Closed (NC)	N.Open (NO), N.Closed (NC)
CONTACT STRENGTH	2 A @ 30 V dc	2 A @ 30 V dc
ERROR RELAY OUTPUT		
OUTPUT TYPE	N.Open (NO), N.Closed (NC)	N.Open (NO), N.Closed (NC)
CONTACT STRENGTH	2 A @ 30 V dc	2 A @ 30 V dc
24V DC PROTECTED VOLTAGE OUTPUT	Yes	Yes
OUTPUT CURRENT	400 mA, Resettable Fused	400 mA, Resettable Fused
24V DC NOT PROTECTED VOLTAGE OUTPUT	Yes	Yes
OUTPUT CURRENT	2A (Unfused)	2A (Unfused)



ENVIRONMENTAL SPECIFICATIONS	
OPERATING TEMPERATURE	-10 °C ≈ +55°C
HUMIDITY	%0 ≈ %95 Relative Humidity
ENVIRONMENTAL CATEGORY	IP30
PHYSICAL SPECIFICATIONS	
CASE MATERIAL	PC/ABS Case
DIMENSIONS (H x W x D)	288 x 333 x 90 mm
WEIGHT	1,2 Kg (without battery)

REDBAN
Fire and Gas Control Systems

DK101, DK102, DK103
CONVENTIONAL DETECTORS





DK10x series conventional detectors are designed to be compatible with all certified conventional panels to operate as smoke, heat or combined.
DK101 smoke detector are very useful for reporting fires early by detecting smoke in slow-starting fires. In this way, it can prevent the fire from growing.
DK102 heat detector is class A1 heat detector. The temperature increase in the environment is detected and fire can be prevented indirectly by heat detector. It can also detect the heat increase in fires caused by explosions and react earlier than the smoke detector.
DK103 combined detector is a combination of smoke and heat detectors. This detector is effective in both slow-starting fires and fires that occur with explosions. For this reason, it is preferred more than other detectors in high-risk areas.

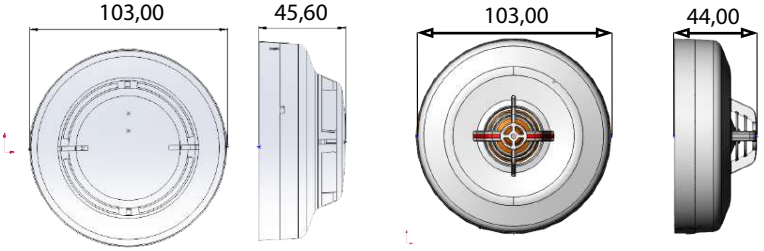
Features
- Robust and aesthetic PC/ABS case
- Microprocessor based design
- Double sided light path indicator
- Self calibration
- Eliminate false alarms
- Led indicator output
- Class A1 Heat Perception
- Competible with EN54-5 & EN54-7

EN 54-5 EN 54-7

EN54-5:2017 + EN54-7:2018 + EN54-17:2005

TECHNICAL SPECIFICATIONS

OPERATING VOLTAGE	16 - 30 Vdc
OPERATING CURRENT	<200 uA @24 Vdc (every 8 seconds with LED blink enabled)
MAXIMUM ALARM CURRENT	<7 mA @ 24 VDC (LED on)
HEAT CLASS	A1
SMOKE SENSITIVITY	0,165 dB/m
ENVIRONMENTAL SPECIFICATIONS	
HUMIDITY	10% - 93% Relative Humidity, Non-condensing
OPERATING TEMPERATURE	-10°C - 50°C



PHYSICAL SPECIFICATIONS

CASE MATERIAL	PC/ABS Case
DIMENSIONS (H x D)	45,6/44 x 100 mm
WEIGHT	105 grams

REDBAN
Fire and Gas Control Systems

BK301 CONVENTIONAL MANUAL CALL POINT





BK301 Conventional resettable call point is designed for manual notification of fire or emergency in conventional fire system. It can be activated by pressing the resettable glass in front of it. It is suitable for indoor use with its robust and stylish design. There is an animated notification led and when the button is active, this led stays on constantly. After pressing the glass, it can be reset with special key. When the button is pressed and activated, it transmits the fire information to the control panel over the communication line.

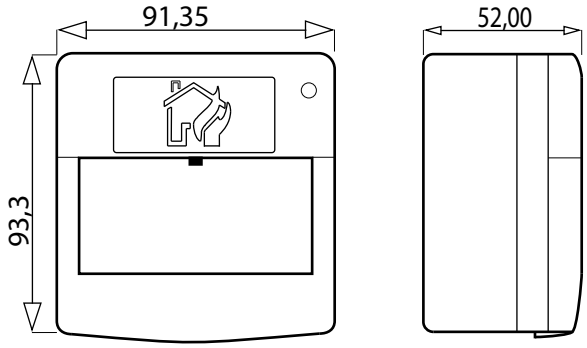
Features
- Robust and aesthetic PC/ABS casee
- Led indicator
- Resettable with special key
- Competible with EN54-11

EN 54-11

EN54-11:2001

TECHNICAL SPECIFICATIONS

OPERATING VOLTAGE	16 to 30 VDC
MAXIMUM ALARM CURRENT	<4 mA @ 24 VDC (included Led blink)
ENVIRONMENTAL SPECIFICATIONS	
HUMIDITY	10% to 93% (Relative Humidity, Non-condensing)
OPERATING TEMPERATURE	-10°C to 50°C
PHYSICAL SPECIFICATIONS	
CASE MATERIAL	PC/ABS Case
DIMENSIONS (H x W x D)	93,3 x 91,35 x 52 mm
WEIGHT	120 grams



REDBAN
Fire and Gas Control Systems

SK808F CONVENTIONAL FIRE ALARM SIREN





SK808F conventional siren is designed to give sound and visual warning in addressable and conventional systems. It is suitable for indoor use with its robust and stylish design. When an alarm occurs on the panel, the SK808F indoor siren becomes active and can warn people both audibly and visually. The flash on the SK808F is 360-degree visible and has a sound intensity of 86 dB (nominal) at 1 meter.

Features

- Robust and aesthetic ABS plastic case
- Transparent red color
- visual warning led and flash
- 86 dB sound intensity at 1 meter (nom.)
- EN54-3 Certified

EN 54-3

EN54-3:2001

CPR No: 1922-CPR-2167

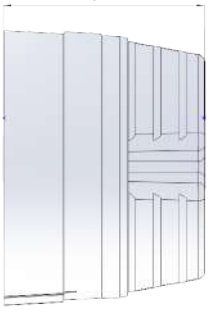
TECHNICAL SPECIFICATIONS

OPERATING VOLTAGE	16 to 30 VDC
MAXIMUM ALARM CURRENT	<7 mA @ 24 VDC (included Led blink)
SOUND INTENSITY	86 dB nom. (max. 105 dB)
ENVIRONMENTAL SPECIFICATIONS	
HUMIDITY	10% to 93% (Relative Humidity, Non-condensing)
OPERATING TEMPERATURE	-10°C to 50°C
ENVIRONMENTAL CLASS	IP30
PHYSICAL SPECIFICATIONS	
CASE MATERIAL	PC/ABS Case
DIMENSIONS (H x D)	78 x 106 mm
WEIGHT	140 grams

106,00



78,00



REDBAN
Fire and Gas Control Systems

REDBAN

QUALITY POLICY

In accordance with our company's vision, our quality policy, as required by ISO 9001:2015 standard;

- Utilizing emerging and current technologies, closely tracking industry developments to continuously enhance product quality, and achieving manufacturing standards that exceeds customer expectations.
- To produce the most suitable, accurate, and economical solutions in the quickest manner to prevent any potential discrepancies that may arise later.
- To ensure the continuity of our quality awareness in accordance with our policy, and to become a respected and exemplary organization to the society and environment we are in, in order to achieve our quality objectives.
- To achieve our goals with our employees in line with our policy, to provide all necessary training, to provide a suitable working environment, and to support this with technology in order to become a family.
- To contribute to the quality of service we provide to the national economy by further enhancing our experience and expertise.
- To ensure customer satisfaction, employee satisfaction, and service quality.
- To ensure maximum communication and efficiency with a system approach in processes and management.
- To fulfill applicable conditions and establish an effective decision-making mechanism by involving employees and suppliers.
- To inspire leadership to all our employees with corporate governance aligned with strategies.

Thus, as management, we commit to ensuring the continuity of the quality management system.

CERTIFICATES



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