AP304 ADDRESSABLE FIRE ALARM CONTROL PANEL

S3
SOLUTION 3

REDBAN
Fire and Gas Control Systems

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 250 devices. In totally 1000 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

Certificates:

EN 54-2   EN 54-4

Dedal

United Arab Emirates Ministry of Interior - Directorate General of Civil Defence - Dubai

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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

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450,00
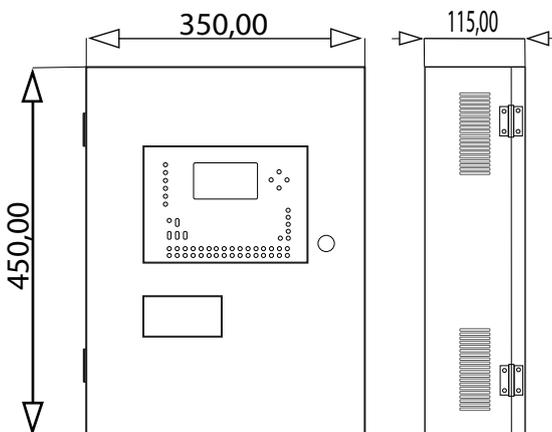
ENVIRONMENTAL SPECIFICATIONS

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)

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SCHEMATIC DIAGRAM
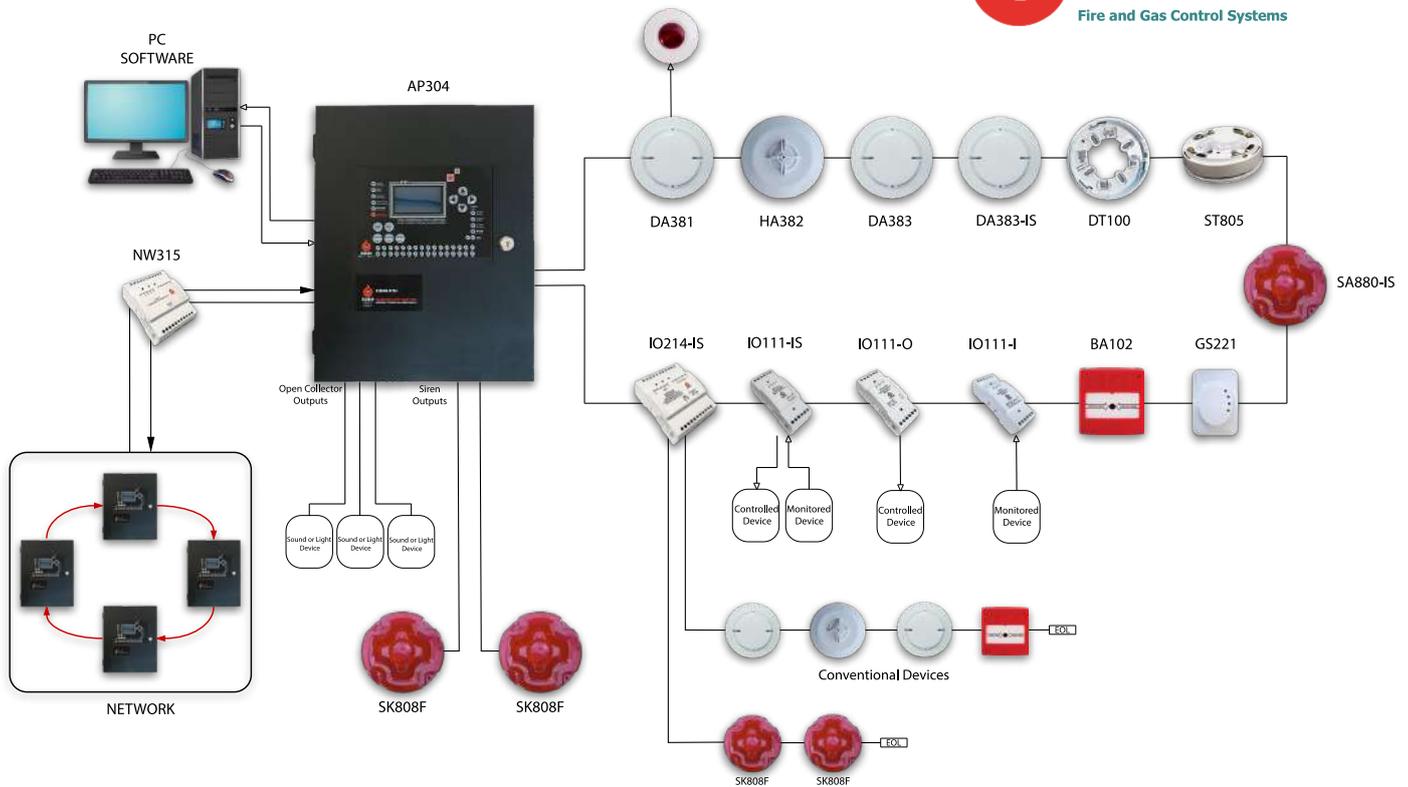
RELEATED DEVICES

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	✓	✓	✓	✓	✓
BA202	Manual Call Point	-	-	-	-	-
BA202-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	✓	✓	-	-	✓

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.
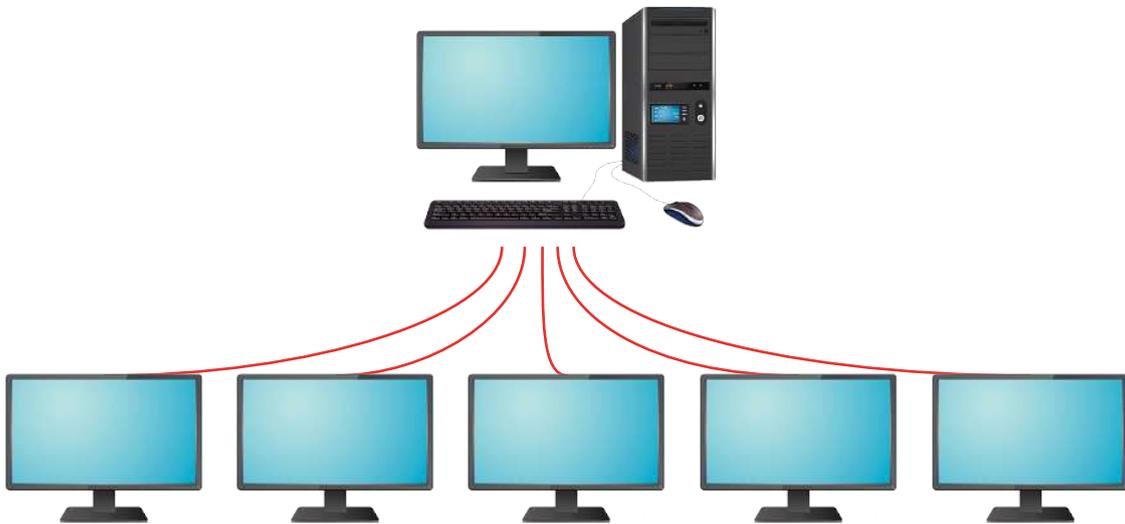
PY100 Configuration Software

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.

General Settings

Loops/Devices

Zones

Outputs

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