AP104 ADDRESSABLE FIRE ALARM CONTROL PANEL

S1
SOLUTION 1

REDBAN
Fire and Gas Control Systems

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

Certificates:

EN 54-2

EN 54-4

Dedal

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

Top Techno Fire & Safety Co. LLC

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
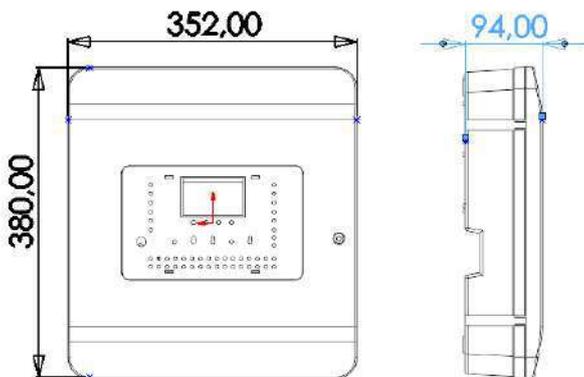
ENVIRONMENTAL SPECIFICATIONS

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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SCHEMATIC DIAGRAM

PC SOFTWARE
PY100
KY200

PL001

AP104

DA381   IA382   DA383   DA383-IS

ST380

GS221

SA880-IS

Siren
Outputs

IO214-IS   IO111-IS   IO111-O   IO111-I

Open Collector
Outputs

BA202

| Conventional Devices | Supervised Siren Output | Controlled Device | Monitored Device | Controlled Device | Monitored Device |

SK808F   SK808F
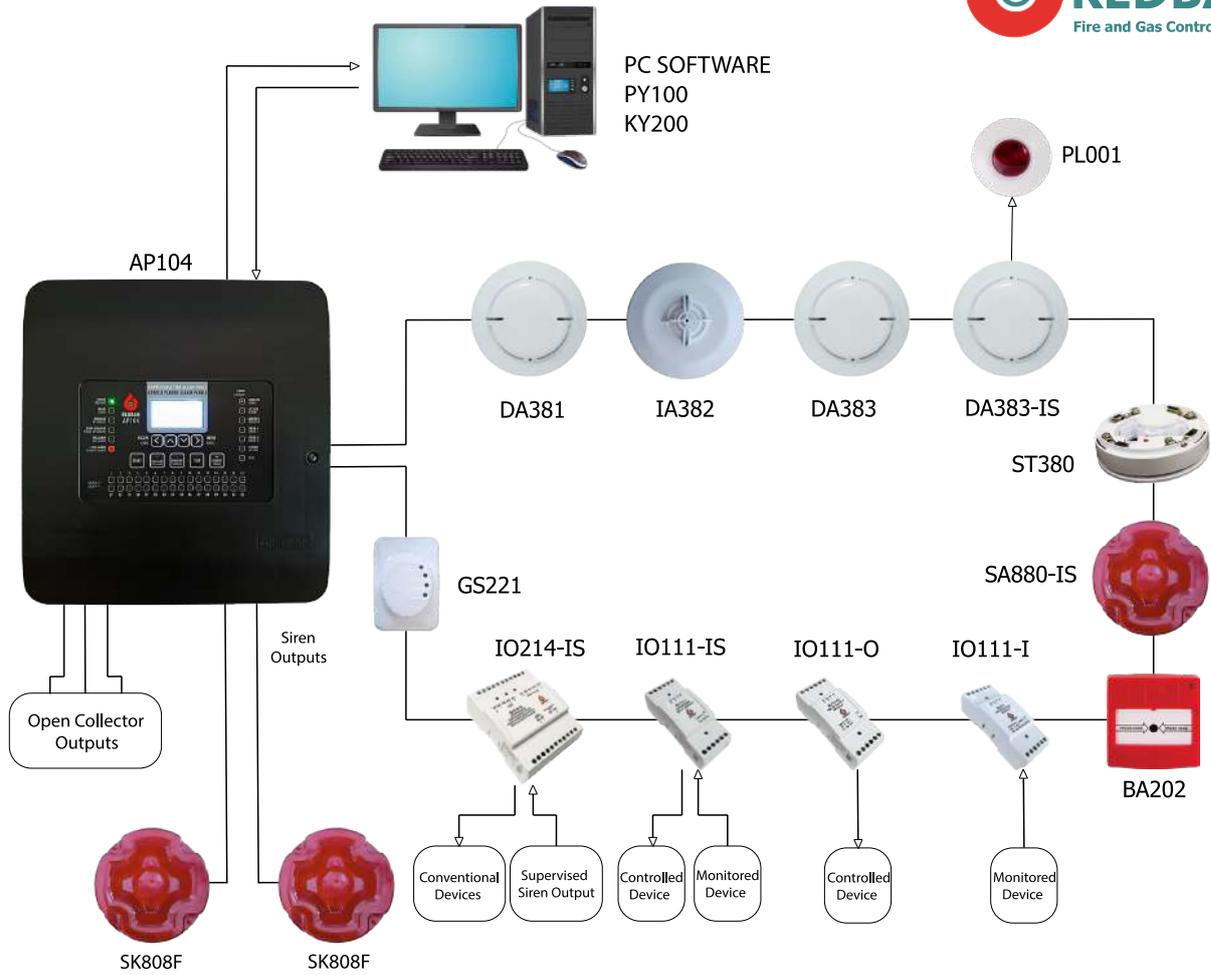
RELEATED DEVICES

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	✓	✓	-	-	✓