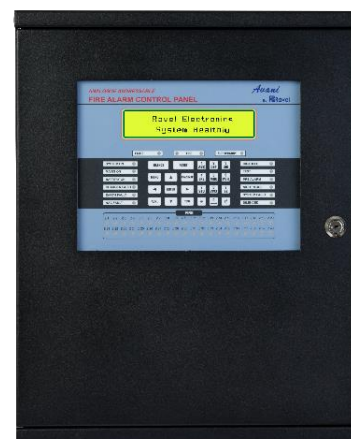# AVANI

ANALOGUE ADDRESSABLE FIRE ALARM CONTROL PANEL

General

AVANI is an analogue addressable having an extensive list of powerful features. The panel has maximum capacity for four loopcards plug in type. On board USB port, on board RS-485 connectivity and touch keypad. Each loop can supports upto 254 devices of any combination and single panel shall support upto 1016 devices of any combination. Higher loop requirement can be catered by using the in bulit networking features of the Fire Alarm Control Panel. There is an optional connectivity for modbus and ethernet.

Features

- Device / Detector wise configuration facility.
- 2000 Event Storage with Real Time Clock.
- Upto 192 grouping facility.
- Pre Alarm Action.
- All field wiring are power limited and supervised.
- Programmable detector sensitivity.
- Maintenace alert.
- Device type verification & Double address Sensing.
- Earth fault annunciation facility at 0 ohms.
- Loop wise remote device test.
- 40 X 4 Characters LCD display.
- 5 IDC Loops (4 Addressable and 1 Conventional loop).
- Maximum 4 numbers of loop card with Class A, Style 5,6 or 7 and Class B Style 4 wiring.
- Maximum 254 devices (any combination) per loop.
- Day / Night Mode facility.
- USB 2.0 Interface for PC connectivity (field Programmable).
- RS 485 Communication facility for Network / Repeater.
- RS 232 Communication facility for thermal printers (optional).
- Programmable Auto Silence Facility.
- Programmable AC Loss Delay.
- Programmable Silence Inhibit.
- Battery low audio, visual warning.

- Two programmable Inputs for Evacuate, Remote Silence & Conventional Zone.
- Three programmable Form C relay for Fire, Fault and Supervisory.
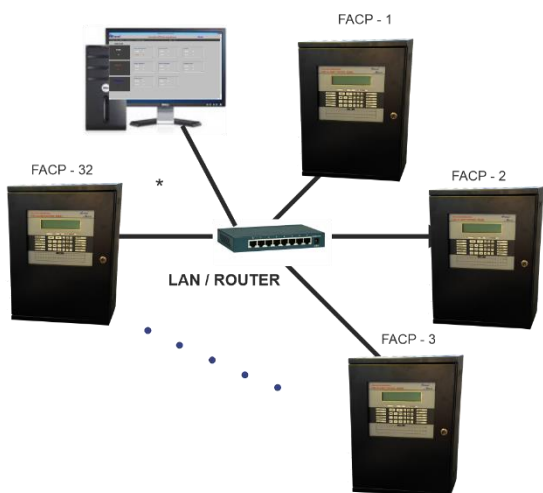- Two no's of Supervise Notification Appliance Circuits.

Special Features

- UL Listed (9th Edition).
- Switched Mode Power Supply.
- Modular Construction, Serviceability.
- Networkable.
- Auto Resettable Fuse.
- Surge Protection.
- Battery polarity protection.
- 32 bit processor.
- Unique protocol feature for fast alarm response.
- Inbuilt conventional circuit.
- Alphanumeric Touch Keypad for user friendly operation.
- Auto learning facility.
- Multi protocol.
- Peer to Peer Networking.
- Redundancy : If the main CPU fails, it will raise an alarm like conventional panel.
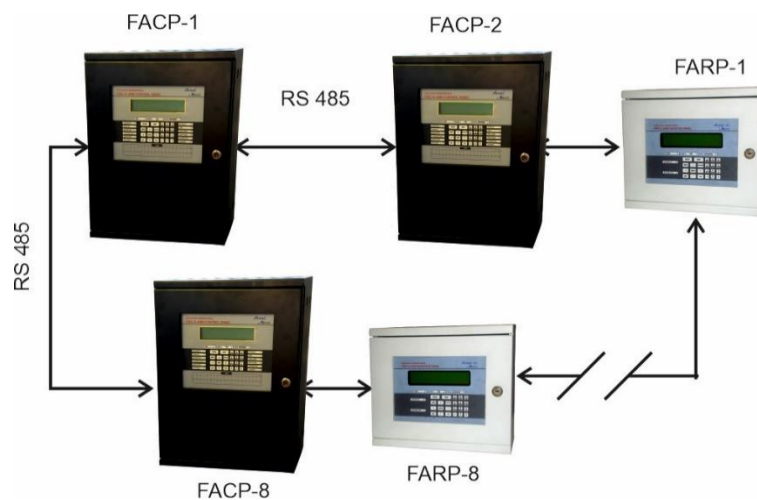
Specification

Electrical Specification		
Primary Power	120 / 220VAC + 10% – 15%, 60 / 50 Hz, 450W	
Standby Power	24VDC (2 No's of 12V 40 Ah (max), built-in for 14Ah) sealed lead acid battery	
Operating Condition	Operating temperature 0 – 49° C / 32 – 120° F Relative humidity 93 ± 2% RH (non-condensing) at 32 ± 2° C / 90 ± 3° F	
Charging Circuit	Charging voltage 28 V, ± 2% nominal Charging current 1.2A (max)	
Notification Appliance Circuits	No of circuits	2
	Wiring style	Class B, Style Y
	Operating Nominal Voltage	24 VDC Nominal
	NAC Current	0.9A per circuit (max)
	Line drop	2.4V
	EOL resistor	4K7, ½ watt
DC Output	Quantity	1 No
	Voltage	24VDC
	Current	300mA (max)
Programmable Relays	Type	Form C
	No of Relays	3
	Relay contact rating	2A @ 30 VDC, 0.5A @ 125 VAC
	Power factor	1.0
Signaling Line Circuits	Quantity	4 No's (max)
	No. of devices per loop	254 No's
	Loop resistance	40 Ω (max)
	Loop capacitance	0.6 µf (max)
	Loop current	300 mA (max)
Initiating Device Circuits	Wiring style	Class B, Style B/C
	No of conventional zone	1
	Normal operating voltage	14 – 21 VDC
	Alarm current	15 – 30 mA
	Short circuit current	45 mA (max)
	Loop resistance	100 Ω (max)
	EOL Resistor	4K7, ½ watt
	Standby current	7 mA (2 mA for detectors)
Programmable Input Circuit	Quantity	1 No
	Normal operating voltage	4 – 8 VDC
	Short circuit current	3 mA (max)
	Loop resistance	100 Ω (max)
	EOL Resistor	4K7, ½ watt
	Standby current	1.25 mA
RS 485	Nodes Circuit Length Wire Type	16 (including 8 Repeaters) 1200m Shielded twisted pair cable
Terminal Block	Plugable Type	2.5 sq.mm Max.
Mechanical Specification		
Dimensions	400W x 500H x 120D (mm)	
Color	White / Red / Black	
IP rating	IP 50	
Construction	16 Gauge (1.6 mm) CRCA sheet with powder-coated finish	
Cable Entry	9 x Ø19mm knockout on top of the cabinet 9 x Ø 22.25mm knockout on top of the cabinet	

Dimensions

Note:- All Dimensions are in MM

Wiring Configuration

Note:
⊙All the field wiring circuits are supervised
⊙All the field wiring circuits are Power limited except 120-220 VAC and Battery.

Input 1
Initiating Device Circuit
Class B Style B/C
End of Line - 4K7 1/2W
PN: RE4K7

IP Based Network

Peer-to-Peer Network

Compatible Devices

Models	Description
RE–317D–SHL	Photoelectric Multi sensor Detector
RE–317D–SL	Photoelectric Smoke Detector
RE–317D–HL	Heat Detector
RE–717MC	Control Module
RE–717MM	Monitor Module
RE–717MR	Relay Module
RE–717MX	Input Output Module
RE–717MZ	Zone Interface Module
RE–717MI	Isolator Module
RE–717M	Manual Call Point
RE–AMB	Modbus Converter
RE–517ME	Ethernet Module
RE–717PT	Printer Module
Avani – RP	Fire Alarm Repeater Panel
RE-314BI	Isolator Base
RE-515MP-A4	Mimic Display System – 32 LED Panel (max)
RE-515MP-A3	Mimic Display System – 64 LED Panel (max)
RE-515MP-A2	Mimic Display System – 128 LED Panel (max)
RE-515MP-AX	Mimic Display System – 512 LED Panel (max)
RE-4K7	End of Line Resistor
RE-716P1T	UL listed Manual Pull Station Single Action
RE-716P1TLP(R)	UL listed Manual Pull Station Dual Action
RE-717PMB	Back Box with Monitor Module
Avani – SOFT	Graphics Software
Avani – CMS	Central Monitoring Software
RE-ACT	Addressable Configuration Tool

Model	Loop
Avani – W / R / B	Analogue Addressable Fire Alarm Control Panel (expandable upto 4 loop cards)
Avani LC	Analogue addressable loop card

Note:
W – White color
R – Red Color
B – Black Color