TECHNICAL SPECIFICATIONS

Main Fire Alarm Panel

Manufacturer	: Micro-CTL Electronics Sdn. Bhd.
Brand	: Mictron
Model	: 9900
Part Number	: AXP-M9900
Operating Temperature	: 0°C - 45°C
Humidity	: Max 95% (non-condensation)
Panel Construction	: Mild steel/1.5mm thickness
Finishing	: Epoxy powder coated paint
Colour	: Light gray or red
Dimension	: 720mm (W) 430mm (H) 150mm (D)
Weight	: 18.6kg (exclude battery)
Testing Standard	: MS1745 Part2 : 2004
	: EN 54 Part2 : 2004
Test Report	: 2014EEB0449, SIRIM

Power Supply & Charger

Part Number (excl. battery)	: AXP-9PS
Input AC voltage	: 220V-240VAC 50Hz
Type	: Constant Voltage and Current
Maximum Output Voltage	: 27.5VDC
Maximum Output Current	: 10A
Power switches	: AC on, CPU on, RPPU/LC on & Bell on

Battery

Manufacturer	: MSB/GP

P1: System Control Display

Part Number	: AXD-9SC
Display Panel Size	: 179mm(W) 325mm(H)
Material	: ABS
Feature	: 1 x Graphics LCD (128 x 64 pixel) 4 x Auxiliary output 24VDC 2 x RS232 serial communication
Operating voltage	: 20 - 28VDC
Operating current	: 140mA

P2: Fire Zone Display

Part Number	: AXD-9FZ
Display Panel Size	: 179mm(W) 325mm(H)
Material	: ABS
Feature	: 7 x Alphanumeric LCD (16 x2)
Operating voltage	: 20 - 28VDC
Operating current	: 6mA

P3: Information Display

Part Number	: AXD-9PT
Display Panel Size	: 179mm(W) 325mm(H)
Material	: ABS
Feature	: Optional space for panel printer

Loop Cotroller Module

Part Number	: AXM-9LC
Feature	: 2 loops per card
Communication method	: Meter Bus
Operating voltage	: 20 – 28VDC
Operating current	: 44mA
Output Loop voltage	: 20 – 27VDC
Maximum loop current	: 300mA per loop
Maximum devices	: 126 per loop
Maximum loop wire length	: 1.2KM (un-twisted pair) 2.0KM (twisted pair)
Type of loop wire	: PVC insulated cable 1.5mm^2
Dimension	: 89mm (W) 64mm (H)

Series AX Detectors & Devices

	Smoke Detector	Heat Detector	Breakglass	Input/Output	Input only	Isolator
Model	: Series AX	Series AX	Series AX	Series AX	Series AX	Series AX
Part Number	: AX-9SL	AX-9HL	AX-9BG	AXM-1ZV-A	AXM-1ZV-B	AX-9SCi
Quiescent Current	: 500uA	500uA	500uA	1mA (+1.5mA FS Zone)	1mA (Not Zone input)	30uA
Alarm Current	: 4mA	4mA	1.3mA	1.5mA (output on)	-	2mA
Operating Voltage	: 17-28V DC	17-28V DC	18-28V DC	20-28V DC	20-28V DC	17-28V DC
Type	: Photoelectric	ROR & Fixed Temperature	Non Resettable	1 Zone & 1 Output (or 1 input/1 output)	1 Zone & 3 input (or 4 status input)	Resettable
Sensor Source	: Infrared	Thermistor	-	-	-	-
Sensitivity	: 0.9-0.14 dB/m	57°C fixed temperature	-	-	-	-
Temperature Range	: -10 to 50°C	-10 to 50°C	-20 to 70°C	0 to 50°C	0 to 50°C	-20 to 70°C
Operating Humidity	: 95% RH(Non cond)	95% RH(Non cond)	95% RH(Non cond)	95% RH(Non cond)	95% RH(Non cond)	95% RH(Non cond)
Output Driver	: 2mA (Open collector)	2mA (Open collector)	-	500mA	-	-
Weight	: 150g with base	150g with base	140g	180g with enclosure	180g with enclosure	25g
Material	: ABS	ABS	ABS	ABS	ABS	ABS
Dimension(mm)	: 100 X 46(D) with base	100 X 46(D) with base	88 X 88 X 59	110 X 110 X 55	110 X 110 X 55	100 X 20 with base
Colour	: White	White	Signal Red	Red & Light Grey	Light Grey	White
Approved Standard	: EN54-7, DIFT	EN54-5, DIFT	MS1745-11, SIRIM	EN54-18, SIRIM	EN54-18, SIRIM	-
Certificate Number	: 0845-CPD-232.1620	0845-CPD-232.1621	2014EEB0276, SIRIM	2008EL0773, SIRIM	2008EL0773, SIRIM	-

Typical Operating Current
(without detectors or devices)

Type	2 loops	4 loops	6 loops	8 loops	10 loops	12 loops	14 loops	16 loops
Total loop controller card	1	2	3	4	5	6	7	8
Loop controller current (mA)	44	88	132	176	220	264	308	352
AXD-9SC & AXD-9FZ (mA)	140 + 6 = 146							
Total current (mA)	190.0	234.0	278.0	322.0	366.0	410.0	454.0	498.0
(with 126 smoke detectors/loop) Total current (mA)	316.0	486.0	656.0	826.0	996.0	1166.0	1336.0	1506.0

Ordering Detail:
AXP-M9900 - ☐ - ☐
- ☐: 2,4,6,8,10,12,14,16 loops
- ☐: G - Grey, R – Red

MICRO-CTL AUTOMATION SDN. BHD. (457153-X)
No.3, Jalan SS13/6A, Subang Jaya Industrial Estate,
47500 Selangor Darul Ehsan, Malaysia.
Tel: 006-03 5633 4993 Fax: 006-03 5636 1117
E-mail: sales@micro-ctl.com www.micro-ctl.com

Micro-CTL reserves the right to alter specification of its product from time to time without notice.

MICTRON SERIES AX Addressable Panel & Devices

MICTRON 9900
FIRE ALARM SYSTEM

1 2 3 10 88 126
ANALOGUE ADDRESSABLE

Mictron 9900 is a fire alarm control & monitoring system suitable for simple to complex installations. Its modular design can interface up to 16 loops in a single cabinet.

Each loop can interface up to 126 devices with combination of input / output modules, smoke detectors, heat detectors and breakglasses.

A 128 x 64 graphic LCD with keypad arranged in "ATM format" is used for operator interface.

Fire zone information is displayed on a separate panel with 7 units of LCD. The user will be able to select the status to be displayed by using the scroll key.

MS1745 EN54 Made in Malaysia

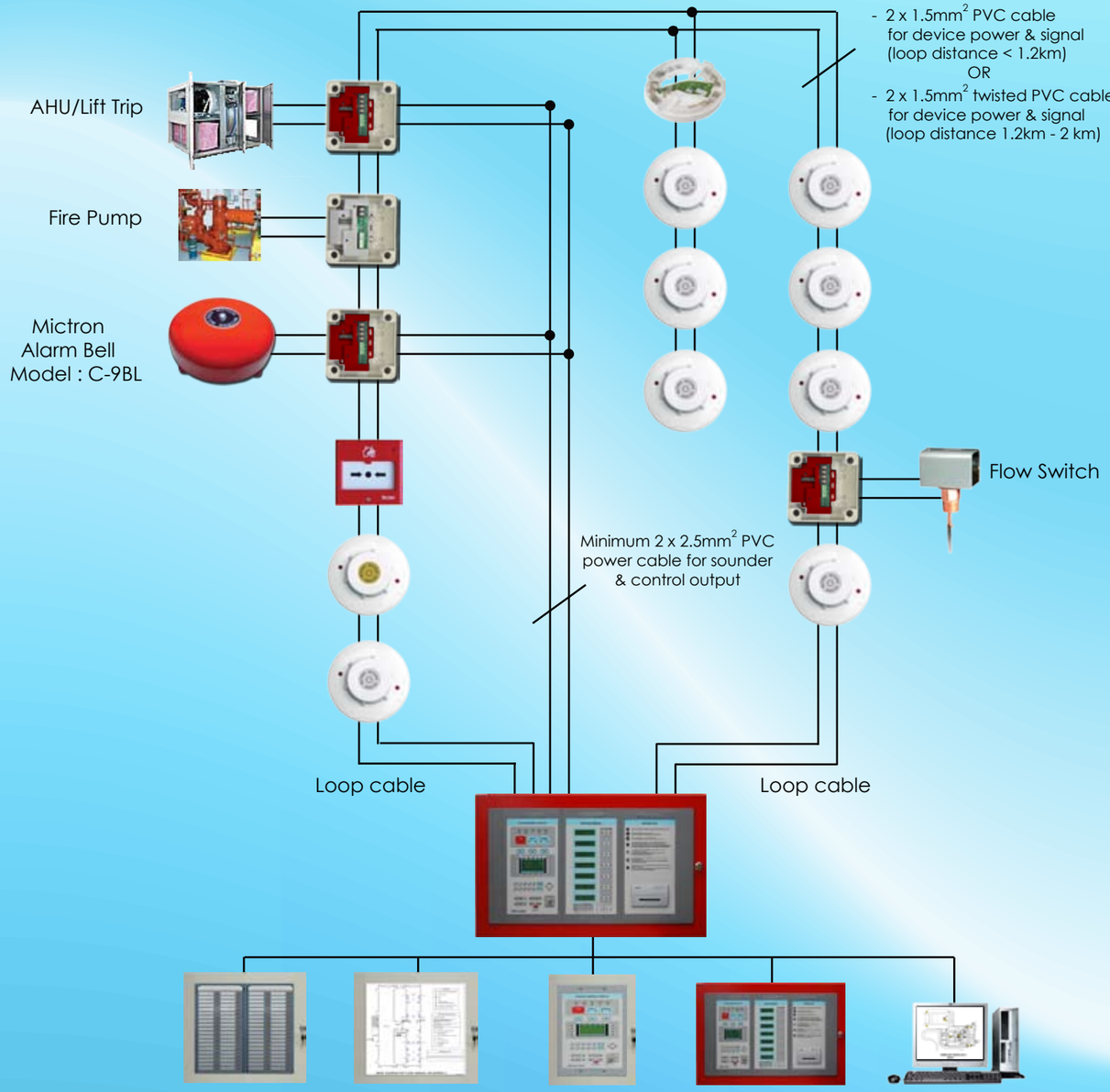
- From 2 loops to 16 loops, with 126 devices per loop.
- Selectable hard or soft addressing of devices.
- Fully monitored loops for integrity and surge protection.
- Multi access levels with password protection.

- Programmable up to 600 fire zones & 600 un-supervised input points.
- 1000 alarm log & 400 general fault or disabled log.
- System Control Display panel with graphic LCD and backlight.
- Built-in 10A power supply & charger with surge suppressor.

- Fire Zone Display panel with 7 alphanumeric LCD (16 x 2) to display zone location.
- Functions for zone display by scrolling up & down or view page by page.
- Selectable zone condition view – All Zone, Alarm, Fault, Disable & Test functions.
- 128 programmable sounder and input/output groups (64 devices/group).

- Optional repeater/sub-panel or printer interface.
- Optional windows based PC graphics software.
- RS232 serial communication with other building systems.
- Optional optical fiber, WiFi or telecom line interface by modems.

Mictron 9900 Analogue Addressable Fire Alarm System Schematic Diagram
(Maximum devices per loop: 126)



Type	LED Repeater	MIMIC Repeater	LCD Repeater	SFAP Control Panel	PC Control Terminal
Model	M9900-LED-R1	M9900-Mimic-R2	M9900-LCD-R3	M9900-SFAP-R4	M9900-PC-R5
Use for	2x20 LEDs alarm indicating panel (max. 15 panels)	Multi-color mimic on perspex with alarm LED	4 lines LCD alarm message display (optional printer)	Full control function repeater identical to main panel	Windows based real time software with floor plans
Local Control Function	No	No	No	Yes	Yes
Power Supply	24V DC or external PSU & battery, power by 240V AC	24V DC or external PSU & battery, power by 240V AC	24V DC or external PSU & battery, power by 240V AC	24V DC or 240V AC (with internal battery)	240V AC (with UPS)

PHOTOELECTRIC SMOKE DETECTOR MODEL: AX-9SL

FIXED TEMPERATURE & ROR HEAT DETECTOR MODEL: AX-9HL

Common Features

Dual LED indicators for 360° viewing angle. The LED will be flashing if communication with main panel is established

Built-in remote LED (Light Emitting Diode) driver

Selectable switches are provided for change of detector address at field (Optional soft addressing is available)

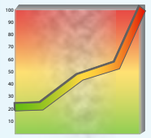
Polarity insensitive for easy wiring unless wired to isolator base

Unique smoke sensing chamber, with stainless steel wrap-around wire mesh for protection against dirt, dust and flying insect

Electronic thermistor sensor is used for long term accuracy & reliability

EN 54-7 DIFT Danish Institute of Fire & Security Technology

EN 54-5 DIFT Danish Institute of Fire & Security Technology



Smoke density analogue value for normal, pre-alarm & alarm condition

Heat detector analogue value for normal and alarm condition

1 ZONE + 1 CONTROL OUTPUT OR 1 STATUS INPUT +1 CONTROL OUTPUT MODULE MODEL: AXM-1ZV-A

1 ZONE + 3 STATUS INPUT OR 4 STATUS INPUT MODULE MODEL: AXM-1ZV-B

EN 54-18

Common Features

Small & compact design for easy installation

Designed for 4 unsupervised inputs or 1 supervised input & 1 output

Housed in a robust casing for added protection, suitable for indoor & outdoor installation

Using latest technology to offer high reliability at competitive price

Suitable for 1 sounder/control output and 1 flow switch zone input

Suitable for pump monitoring, CO_2 panel, valve input as well as 1 zone input

SHORT CIRCUIT LOOP ISOLATOR MODEL: AX-9SCi

ADDRESSABLE BREAKGLASS MODEL: AX-9BG

EN 54-11 MS 1745-11

Loop wire short circuit isolator design for loop controller AXM-9LC

The LED will be turned on by the panel if the breakglass is activated

Low current with external fault LED if the isolator is activated

Unique ALARM/RESET test tool for easy maintainance

PORTABLE TESTER

The portable tester is used to set the address of the AX detectors & devices (soft addressing), it is power by AC adaptor or battery. The tester can also be used to read the status of the detector or device & show on its LCD , as well as control the LED or the output.