



*The* **COST EFFECTIVE**  
*choice from*  
*an* **ESTABLISHED**  
*local manufacturer*  
*For* **MAXIMUM**  
*Reliability &*  
*speedy* **SERVICE**



Made in Malaysia

**MS1745**    **EN54**



# **MICTRON 900**

## **FIRE ALARM SYSTEM**

**Microprocessor based  
Multiplex technology**





## System Features

# Mictron 900 Microprocessor Based Multiplex Fire Alarm System

3 years system warranty

10 years parts availability

Affordable total system cost

> 1000 system installed

Flexible system expansion

Simple system operation

Ample ex-stock spare parts

Reasonable charge on servicing

Short commissioning period

Made for Malaysia environment

Zone LED for Alarm, Fault & Disable

Compatible to all conventional sensors

Built-in 40 column printer

Un-limited mimic LED indications

Superb interlinking capability

Customized repeater display or mimic

Serial RS-232 communication output

Optical fiber or wifi linking

Common TCP/IP network

MICTRON 900 is a fully Malaysia designed and produced panel. It's simple design, specially suited for local environment, meets local requirements and ensure that commissioning, maintenance and system operation can normally be carried out by semi-skilled personnel.

## SYSTEM DESCRIPTION :

A typical MICTRON 900 system consists of 2 buses. Each bus can interface up to 16 digital sub-panels (RPPU).

### Main Fire Alarm Panel (MFAP)

This is the central controller whereby all the information are processed for visual display on the LCD panel, LED zone display panels and Mimic panel.

Warning audio signals are activated to alert the guard and building occupants. An event logging printer is also provided for hard copy record of the alarm complete with date / time, zone and alarm location details.

The user friendly operator keyboard at the MFAP allows authorized personnel to disable or reset any incoming alarm.

### Customized LED Display Panels (M900-DP)

Consists of visual indicators (LEDs) of fire zone, status indications, control output and sounder points. Operator can easily identify location of all fire events through this display panels.

### Customized Multi-Colour Mimic Panel (M900-Mimic)

Consists of all floor plans and section of building printed on perspex sheet with LEDs on the mimic floor plans to indicate location of each fire zone.

### Digital Sub-panel -RPPU (Remote Programmable Processing Unit)

A RPPU is a distributed data gathering panel. All the external devices such as breakglasses, flow switches, smoke detectors, status indications, control output points and bell points are connected to the RPPU.

The microprocessor in the RPPU will convert the data into serial format and communicate with the MFAP via standard computer data cable.

A standard RPPU can interface up to :-  
32 input points (alarm zones or status points),  
3 bell zones and 5 control output points.

A mini-size RPPU can interface up to :-  
12 input points (alarm zone or status points),  
2 bell zones and 2 control output points.

Depending on building zoning layout, each RPPU can be used to serve several floors.

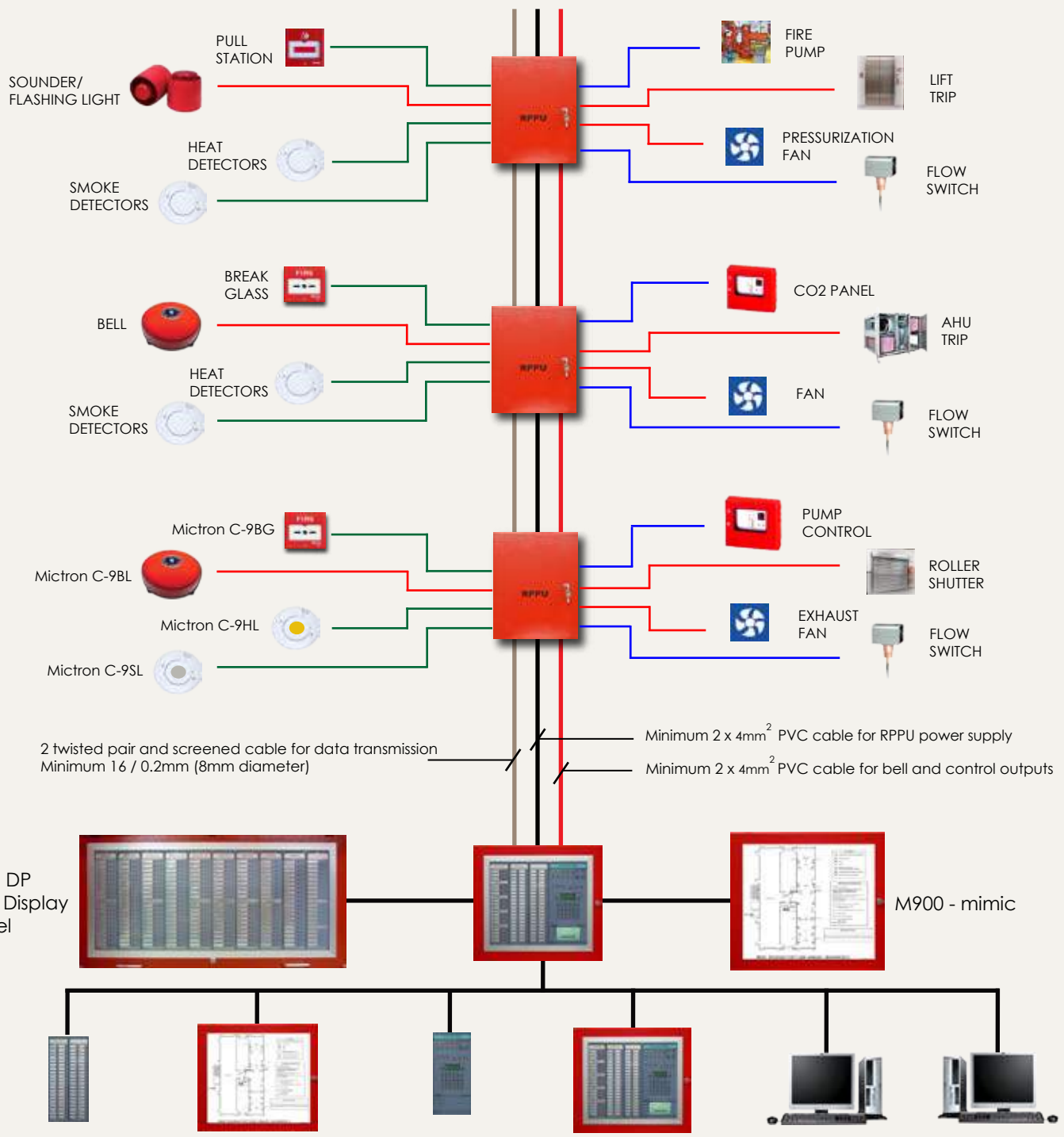
### Interlinking Capability:

Integration between MFAP and other sub-system can be achieved through 2 twisted pair of data cable or other medium.

The sub-system can be a full repeater or just a simple LCD display with basic control functions.

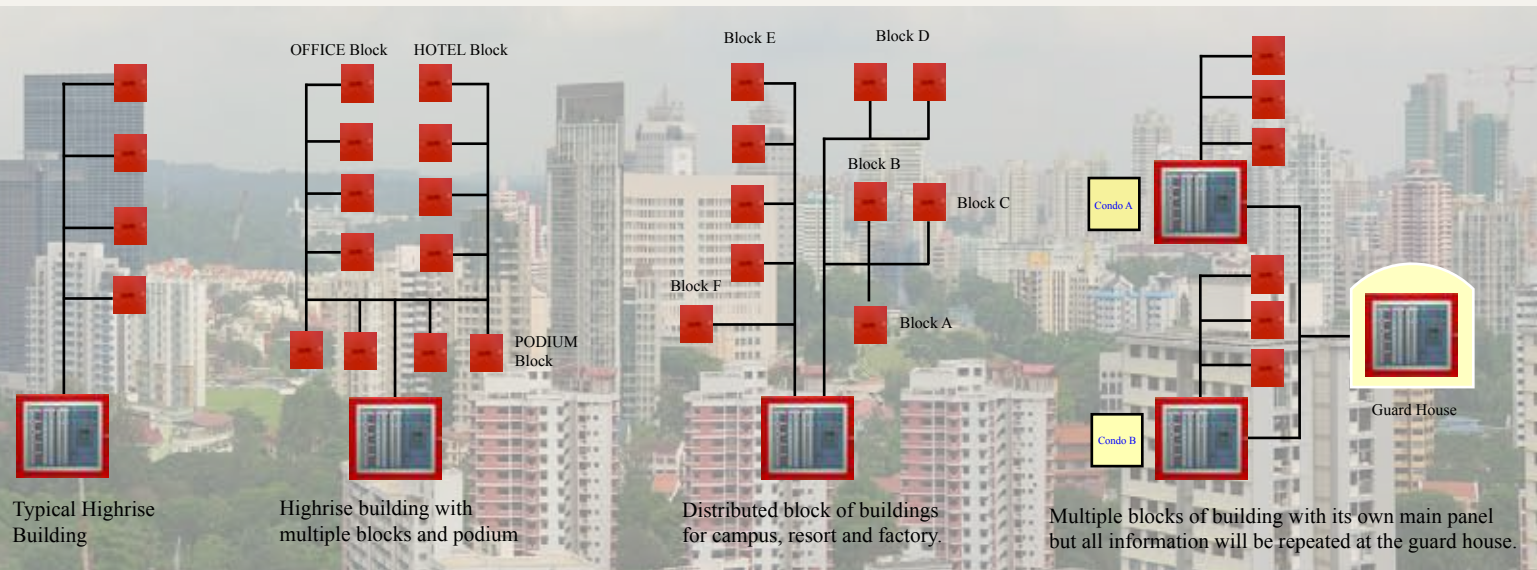
High level integration to other building services system can also be achieved by RS-232 serial communication, with protocol provided upon request.

Various converters or modems are available to convert RS-232 for optical fiber, Ethernet (TCP/IP) or WIFI communication.



Type	: LED Repeater	Mimic Display	LCD Repeater	SFAP	PC Station	Link with others
Model	: M900-LED-R1	M900-Mimic-R2	M900-LCD-R3	M900-SFAP-R4	M900-PC-R5	M900-Link-R6

Depending on the distance of the field devices to the RPPU, and the RPPU looping cable to the MFAP, the wire size may vary, refer to actual project schematic drawing for verification.



Typical Highrise Building

Highrise building with multiple blocks and podium

Distributed block of buildings for campus, resort and factory.

Multiple blocks of building with its own main panel but all information will be repeated at the guard house.



# TECHNICAL SPECIFICATION



## Main Fire Alarm Panel

Manufacturer	: Micro-CTL Electronics Sdn. Bhd.
Brand	: Mictron
Model	: 900
Part Number	: MP-M900
Microprocessor	: Freescale MC9S12 & Rabbitcore 2000
Memory	: 512Kb Flash & 64Kb RAM
Ports	: 2 RS232 & 2 Multidrop RS485 & 2 parallel
Fire Brigade Link	: Volt - free contact
Power Consumption	: 24V DC 150mA
Operating Temperature	: 0°C - 45°C
Humidity	: Max 95% (non-condensation)
Panel Construction	: Mild steel/1.6mm thickness
Finishing	: Epoxy powder coated paint
Colour	: Red
Dimension (mm)	: 600 (w) x 530 (H) x 180 (D)
Weight	: 30kg (inclusive of 2 x 12V battery)
Testing Standard	: MS1745 Part2 : 2004
	: EN 54 Part2 : 2004
Test Report	: 2014EEB0212, SIRIM
Printer Type	: Impact Dot Matrix
Print width	: 40 characters/line
Printer Interface	: RS232 serial
Print Paper	: 57.5mm white paper roll
Manufacturer	: SPRT

## Power Supply & Charger

Part Number (excl. battery)	: MP-9PS
Input AC voltage	: 220V-240VAC 50Hz
Type	: Constant Voltage and Current
Maximum Output Voltage	: 27.5VDC
Maximum Output Current	: 7A
Power switches	: AC on, CPU on, RPPU on & Bell on

## Battery

Manufacturer	: MSB / GP
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## Display Panel

Part Number	: M900 - DP
Operating Temperature	: 0°C - 45°C
Humidity	: Max 95% (non-condensation)
Panel Construction	: Perspex sheef on aluminium panel
Panel Colour	: Light grey/blue/black lettering
Enclosure Construction	: Mild steel/1.6mm thickness
Enclosure Finishing	: Epoxy powder coated paint
Colour	: Red
Dimension	: Customized



RPPU - 32

## Digital Sub - Panel (RPPU)

Model	: <b>RPPU-32</b>
Part Number	: M900-RPPU-ALL(32)
Zone module card	: MCP-9R3B
Termination module card	: MCP-9R/T
Capacity inputs ( zone / status )	: 32 or 32 or 27
bell outputs	: 3 3 8
control outputs	: 5 9 4
Power Consumption	: 20V - 32V DC, 20mA
Zone alarm current	: 10mA
Operating temperature	: 0 - 45 degree C
Operating humidity	: 5% - 95% (non-condensation)
Enclosure Construction	: Mild Steel/ 1.2mm thickness
Finishing	: Epoxy powder coated paint
Colour	: Red as standard
Dimensions (mm)	: 356(W) x 548(H) x 128(D)



## Power Supply & Charger for RPPU

Model	: <b>MPS-10A</b>
Part Number	: EXTCHG10A-ALL
Maximum Output Current	: 10A
Input AC voltage	: 220V - 240V AC 50Hz
Type	: Constant Voltage and Current
Maximum Output Voltage	: 27.5V DC
Operating temperature	: 0 - 45 degree C
Operating humidity	: 5% - 95% (non-condensation)
Enclosure Construction	: Mild Steel/ 1.2mm thickness
Finishing	: Epoxy powder coated paint
Colour	: Red as standard
Battery ( unknown AH)	: Built in space for 24VDC 7AH sealed lead acid battery (excluded)
Dimensions (mm)	: 356(W) x 410(H) x 150(D)



## Mimic Display

Model	: M900 - Mimic
Material	: Multicolour mimic on perspex with alarm LED
Operating Temperature	: 0°C - 45°C
Humidity	: Max 95% (non-condensation)
Enclosure Construction	: Mild steel/1.6mm thickness
Enclosure Finishing	: Epoxy powder coated paint
Colour	: Red
Dimension	: Customized



RPPU - 12

## RPPU - 12

Model	: M900-RPPU-ALL(12)
Zone module card	: MCP-9R3B
Termination module card	: MCP-9R/T3
Capacity inputs ( zone / status )	: 12
bell outputs	: 2
control outputs	: 2

## MPS-10A

Model	: <b>MPS-2A</b>
Part Number	: EXTCHG1A2-ALL
Maximum Output Current	: 2A
Input AC voltage	: 220V - 240V AC 50Hz
Type	: Constant Voltage and Current
Maximum Output Voltage	: 27.5V DC
Operating temperature	: 0 - 45 degree C
Operating humidity	: 5% - 95% (non-condensation)
Enclosure Construction	: Mild Steel/ 1.2mm thickness
Finishing	: Epoxy powder coated paint
Colour	: Red as standard
Battery ( unknown AH)	: Built in space for 24VDC 7AH sealed lead acid battery (excluded)
Dimensions (mm)	: 356(W) x 410(H) x 150(D)

## MPS-2A

Model	: M900 - Mimic
Material	: Multicolour mimic on perspex with alarm LED
Operating Temperature	: 0°C - 45°C
Humidity	: Max 95% (non-condensation)
Enclosure Construction	: Mild steel/1.6mm thickness
Enclosure Finishing	: Epoxy powder coated paint
Colour	: Red
Dimension	: Customized

Type : LED Repeater	Mimic Repeater	LCD Repeater	SFAP	PC Station	Link with other	Optical Fiber Interface
Model : M900-LED-R1	M900-Mimic-R2	M900-LCD-R3	M900-SFAP-R4	M900-PC-R5	M900-Link-R6	M900-OF
Used For : LED to show alarm status	Multicolour mimic on perspex with alarm LED	LCD to show alarm status	Panel linking to show each other's information	Windows based real time software to show floor plans	Link with other system by RS232 or volt free relay	Link with repeater or other system by optical fiber.
Local Control Function : No	No	No	Yes	Yes	No	
Power Supply : 24V DC or external PSU and battery power by 240V AC			24V DC or 240V AC (with internal battery)	240V AC (with UPS)	-	
Maximum Distance : 2km	2km	2km	2km	100ft	-	
Cable Type : 2 twisted pair 7 x 0.2mm (4 x 1.3mm - sq) and screened						

## Other available Products:



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