# Fire Alarm Systems JP Product Range Guide



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# **Business Overview**

The Nittan Group has been at the very forefront of the international fire protection industry since 1954 and has sales, R&D and manufacturing bases in Japan, Vietnam, and the UK. Throughout the world, Nittan has an enviable reputation for continuous innovation and exceptional quality. The group currently enjoys around \$400million turnover worldwide and manufactures millions of detectors each year, while pursuing a commitment to total excellence in everything we do.

Despite its position as a major global fire safety specialist company, Nittan always prides itself in providing a dedicated and personal service to its clients. When you look to Nittan to provide you with an optimum fire safety solution, you'll enjoy all the major benefits of dealing with a world leader – while receiving a personal level of service and support that few large companies could ever hope to achieve.



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In addition and as a completion to the fire detection solutions listed in this catalogue, NITTAN offers also a complete selection of advanced products. For further information, please contact NITTAN overseas business division from: http://www.nittan.com

# JP PRODUCTS

# **Conventional Fire Alarm Control Panels**

# 1PM3



- Re-sounding mode of panel alarm sounder
- Individual alarm delay OFF function
- CPU trouble back-up function
- Output for local alarm bell sounding Emergency PA system interlocking

# Simple design for installation, operation and maintenance

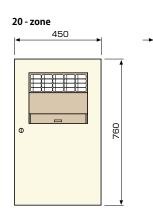
- Lightning protection
- Alarm delay ON/OFF switch
- Auto reset switch
- Maintenance switch (all alarm silence)
- Plug-in type terminals
- Color Universal Design for people with color vision deficiency

# Self-diagnosis function

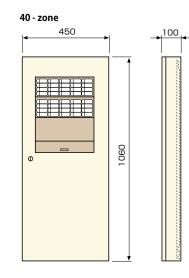
- Constant monitoring disconnection of detector line
- Monitoring circuit voltage low
- Monitoring CPU trouble
- Monitoring fuse blow
- Monitoring disconnection of standby battery
- Constant monitoring disconnection of emergency PA line



# Dimension

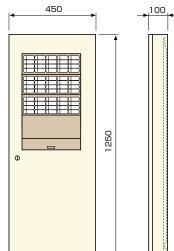


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'**1**9



60 - zone

Specifications	1PM3-nLA					
Number of zones	10	20	30	40	50	60
Number of bells (10mA)		20	·	30		
Number of bell blocks	s 10 15 20					
Power supply			AC220V±10	% (50/60Hz)		
Indicator light			0.4A (A	AC25V)		
Standby battery		0.45Ah 1.2Ah				
Dimensions (W x H x D mm)	(D mm) 450 x 760 x		450 x 1060 x 10		450 x 1250 x 10	
Weight	18 kg 25 Kg 30kg		kg			

# **1PV0**



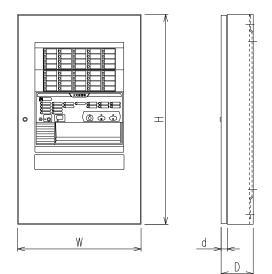
# Main features

- Large indicators and switches for easy operation
   Indicating the alarm zone and troubles by digital display with 7 segments LEDs
   Event history log stores up to 1000 of alarm and operation histories
   Monitoring detector circuit open, short and ground fault condition
   Lightning protection circuit for external lines
   Available in 10 to 160 zone models

- 1PV0-nL series for fire alarm
- 1PV0-nY series for fire alarm with smoke control
- Panel buzzer beeps with sweep tone for easy awareness

1PV0-40YD

# Dimension



Model	Mounting	Fire zones	Dimensions(mm)			
1PV0-10L/-10YA		10				
1PV0-20L/-20YB		20	W 500 H 850			
1PV0-30L/-30YB	Mall	30	D 130 d 25			
1PV0-40L/-40YD	Wall	40				
1PV0-50L/-50YD		50	W 500 H 1100			
1PV0-60L/-60YD		60	D 130 d 25			
1PV0-J-70L/-70YH ₹ 1PV0-J-160L/-160YM	Floor	70 ≀ 160	W 600 H 2000 D 350 d 40			

Specifications	1PV0
Number of zones	10 to 160 zones
Number of detectors	Smoke : Max 40 pcs/zone, 20 x zones pcs in total
End of line device	CRE, 10kΩ, 20 kΩ
Alarm delay time	For smoke detector: 60 sec. For heat detector: 20 sec.
Local alarm belles	DC24V 10L-15L: 0.3A, 20L-70L: 0.45A, 80L and more: 0.6A
Number of bells (10mA)	10L-15L: 30, 20L-70L: 40, 80L and more: 60
Power supply	AC220V±10% (50/60Hz)
Standby battery	DC24V, Sealed Type Ni-Cd Battery
Power supply for smoke control	1A
Number of annunciator	1 unit (PSH series)

# JP PRODUCTS

# 2PD1-10L



# Main features

- Conpact size
- Alarm delay function
- Heat detector : 20 sec - Smoke detector : 60 sec
- Supervision of detector lines and fault conditions
- Energy saving technology for its running cost
- Lightweight (Using flame retardant ACS resin)
- High reliability minimizes maintenance cost
- Surge absorber
- Push-in terminals

### Built-in backup battery

Specifications	2PD1-10L		
Number of zones	10		
Number of detectors	Heat type (2SC series): Required number Smoke type (2KH series) : 20 / zone		
End of line device	CRE		
Alarm delay time	Nominal alarm delay time : 60 sec (Heat :20sec / Smoke : 60sec)		
Local alarm bells	DC24V 0.1A (B,BC)		
Indication lamp	AC25V 0.6A (PL,PL')		
Common alarm contact	Max load : DC24V 1.0A (GA,GB,GC)		
Number of bells (10mA)	10		
Power supply	AC220V±10% (50/60Hz)		
Standby battery	DC24V 0.45Ah		
Dimensions W200 x H280 x D65mm			
Weight	2.2kg		

Coming Soon!

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COLOR UNIVERSAL DESIGN

# 2PM0

The 2PM0 is a new fire alarm control panel equipped with user-friendly interface to improve operation.



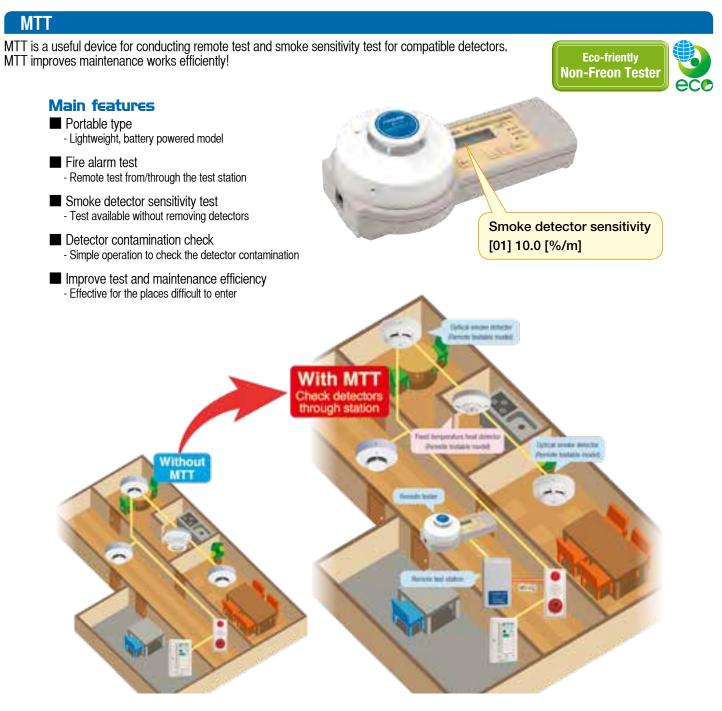
# Main features

- Simple system structure
  - One unit for 5 zones of detectors and 5 zones of smoke control
- Smoke control function
- Information Display
  - Built-in display can show various information such as battery level, and alarm/trouble condition.
- Voice Alarm in English
- Panel configuration without PC and tool
- Equipped with various signal transfers
- common fire, common trouble, AC trouble, fan damper activation etc.

  Lightweight
  - 11 kg including a standard battery
- Large control switches for easy-to-use
- Color Universal Design for people with color vision deficiency

Specifications	2PM0
Number of zones	5 zones for detectors / 5 zones for smoke control
Number of detectors	Smoke : Max 40 pcs/zone, 100 pcs in total
End of line device	CRE, 10kΩ, 20 kΩ
Alarm delay time	For smoke detector: 60 sec. For heat detector: 20 sec.
Local alarm belles	DC24V 0.2A (B, BC)
Number of bells (10mA)	20
Power supply	AC220V±10% (50/60Hz)
Standby battery	DC24V, 1.65 Ah, Sealed Type Ni-Cd Battery
Dimensions	W375 x H600 x D100 mm
Weight	11.0 kg (including battery)
Power supply for smoke control	1A (D1 - D5; DC)
Power supply for annunciator	150mA / Number of Annunciator (PSC type) : Max 2 units

# **Remote Tester**



# Detectors and test stations compatible with the MTT



# Peripherals

SMOKE

SMOKE

# **Conventional Detectors**

# PK2B-DP-006

- · Dual optical smoke detector
- · Reduces false alarms caused by non-combustion products
- · 360°OMNIVIEW LED indicator for visible indication of operation
- · Remote testing function available by MTT
- · Automatic sensitivity compensation
- Power consumption 40µA (Standby), L-C: 65 mA / P-C: 50 mA (Alarm) • 1 open-collector output equipped
- · Compatible with Nittan B3-J, 3T and EVA-UB4 bases

# <adl>AD3-P

·Optical smoke detector

- · Reduces false alarms caused by non-combustion products
- · 360°OMNIVIEW LED indicator for visible indication of operation
- Remote testing function available by MTT
- · Automatic sensitivity compensation • Power consumption 40µA (Standby), L-C: 65 mA / P-C: 50 mA (Alarm)
- 1 open-collector output equipped
- · Compatible with Nittan B3-J, 3T and EVA-UB4 bases

# PS2B-PH-014

## HEAT ROR

SMOKE

BEAM

- · Rate-of-rise heat detector · 360°OMNIVIEW LED indicator for visible indication of operation
- · Remote testing function available by MTT
- Power consumption 40μA (Standby), L-C: 65 mA / P-C: 50 mA (Alarm) · 1 open-collector output equipped
- · Compatible with Nittan B3-J, 3T and EVA-UB4 bases



CD-70-LS. 1CD-70-L

### Fixed temperature heat detector, 70°C · Mechanical operating heat sensor - for reliability

- Response indicator lights up to show which detector has activated · Easy installation and wiring connection - reduces installation costs

HEAT ROR

HEAT 70°C

- · Connections are non-polarized reduces wiring mistakes
- · Wide working voltage available to suit most control panels
- · Self-resetting and requires no replacement of internal elements reduces maintenance costs
- Power consumption 0A (Standby)
- Compatible with Nittan B3-J, 3T and EVA-UB4 bases
- · LS type equipped with function of head removal notification

# KRG-1D

# Stand alone type optical smoke detector for using in residence

SMOKE, BATTERY TYPE

HEAT, BATTERY TYPE

IR FLAME

- · Automatic sensitivity compensation function
- · Powerful sweep alarm sound
- User friendly design for easy operation
- · Powered for 10 years by a long life battery

# CRG-1D

# · Stand alone type heat detector for using in residence

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- Fixed temperature, 65°C
- · Powerful sweep alarm sound
- User friendly design for easy operation
- · Powered for 10 years by a long life battery

# PR2B-P-009

### · IR flame detector

- · Dual IR sensing method reducing false alarms
- Low profile, compact size
- 25 to 35m long detection distance
- Max 100° wide detection angle
- The operation indicator flickers to indicate the detector circuit trouble · Flexible installation to ceiling or wall with an adjustable mounting brackets
- - Compatible with Nittan B3-J, 3T and EVA-UB4 bases Power consumption 110 µA (Standby), 65 mA (Alarm)

2KH2-LS

- Optical type smoke detector
- Low profile designing for visual concealment · Effective screen for insects and dust particles
- Effective smoke inflow characteristics
- Wind and atmosphere variations have no influence
- No polarity allows simple wiring connection
- Wide working voltage of DC14.5V 30V is designed to suit most panels
- · Power consumption less than 24µA (Standby), 65mA (Alarm)
- · Compatible with Nittan B3-J, 3T and EVA-UB4 bases
- · LS type equipped with function of head removal notification

# KLD-KPT2

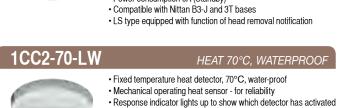


- · Beam type smoke detector
- Wide range of monitoring distances 5m-100m
- · Effective for open air space such as atria and exhibition sites etc. · Reduce false alarms caused by transient or local smoke such as cigarette
- Sensitive against smoke spread around a wide area compared to ordinary point type smoke detectors
- Drift compensation function
- Not susceptible to light noise
- Power consumption 760µA (Standby)
- · Compatible with LP04 and LP05 remote station
- · Periodical automatic test available by 1PS1 dedicated fire alarm control panel

# LP04. LP05

- · Remote station for beam type smoke detector
  - · Allowing functional testing of a high level mounted beam detector to be carried out
  - · Operational test
  - Signal monitoring
  - Maintenance friendly operation
  - Fault/Trouble signal (given an 50% of primary level)





SC-LS. 2SC1-L

Rate-of-rise heat detector

reduces maintenance costs

reduces maintenance costs · Power consumption 0A (Standby)

· Power consumption 0A (Standby)

· High quality components are fitted for greater reliability

· Self-resetting and requires no replacement of internal elements -

Easy installation and wiring connection - reduces installation costs

· Self-resetting and requires no replacement of internal elements -

· Connections are non-polarised - reduces wiring mistakes

· Wide working voltage available to suit most control panels

HEAT 70°C, WATERPROOF

· Indication lamp lights when the detector is activated

· The sensing chamber is electrically insulated





# DRD1-W



**1RB1-EW** 

### IR FLAME, IP67

- · IR flame detector, drip-dust proof (IP67), with remote test function
- · Triple waveband IR sensing method reducing false alarms Max 100° wide detection angle
- Max 60m detection distance with 33cm x 33cm fire tray · 360°OMNIVIEW LED indicates the conditions by four colors (Alarm, Trouble, Startup, Testing)
- Selectable Response time and Self-Test cycle
- Current consumption approx. 6 mA (Standby), 50 mA (Alarm)
- · Equipped with an angle adjustable bracket

# IR FLAME. EX-PROOF

- · IR flame detector, explosion-proof/drip-dust proof (IP67), with remote test function
  - Dual IR sensing method reducing unwanted false alarms Max 120° wide detection angle
- Max 55m detection distance with 33cm x 33cm fire tray
- The operation indicator flickers to indicate the detector circuit trouble · Flexible installation to ceiling or wall with an adjustable mounting brackets
- Ex-proof class : Exd II CT6



### HEAT, EX-PROOF

- · Fixed temperature heat detector, explosion-proof type • Operating temperature range: 60°C, 70°C, 80°C, 90°C, 100°C,
- · Contact capacity DC30V, 100mA
- · Ex-proof class : d2G4

- 120°C, 150°C

# Annunciator

### **PSH-nL**



- · Conventional annunciator
- · Upon receiving the alarm signal, corresponding zone indicator will illuminate with buzzer sound
- · Zone number 5L-100L wall mounting type
- Power supply DC24V
- Compatible panel; 1PE/PF/PK/PM/PN/PQ/PS series
- · Equipped with silence switch and telephone jack

# **Surge Protection**



- · Surge protection device for conventional zone circuit
- · Protect detector lines from lightning surge
- · LSP-1 for 5-zone, LSP-2 for 14-zone

# **Detector Bases**



· Detector base for PK2B-DP-006, 2KAD3-P, PS2B-PH-014, 2KH2-LS, 2SC-LS, 2SC1-L, 1CD-70-LS, 1CD-70-L, PR2B-P-009, etc.

# Manual Alarm Station

- · Conventional manual alarm station with telephone jack
- · Stylish, lightweight, strongly built
- · Easy installation and maintenance
- · Latching action when operated
- · Reset button provided for easy rest
- Integral response indicator
- Contact capacity: DC30V 250mA
- · Compatible telephone handset; PTL-1



- · Conventional manual alarm station · Stylish, lightweight, strongly built
  - · Easy installation and maintenance
  - · Latching action when operated
  - · Reset button provided for easy rest
  - Contact capacity: DC30V 250mA

# 1MM1W-PL



- · Conventional manual alarm station with Indicator
- · Stylish flat surface design, lightweight Japanese label model
- · Latching action when operated · Reset button provided for easy rest
- · Integral response indicator
- Contact capacity: DC30V 250mA
- Power rating for indicator: 24V AC/DC, 12mA
- · Compatible telephone handset; PTL-1

# **Telephone Handset**

- Telephone handset
- · Compatible fire alarm control panel; 1PM3, 1PV0, etc. · Compatible manual alarm station; 1MF1A, 1MM1W-PL, etc.



CPC-3

 Control unit for 0KB3 detector Compact unit W110 x H40 x D195 mm

SMOKE

· High degree of protection against unwanted false alarms · Extremely reliable fire detection

· Advanced, premium smoke detector, machinery built-in type

· Use with CPC-3 control unit

 Scattering light detection • Very small - W 40 x H 45 x D 40mm

 Explosion-proof smoke detector Rating: DC24V · Power consumption 60µA (Standby), 60mA (Alarm) • Ex-proof class : Exd II BT6

# **KP-35D**

FLS-02E



# · Gas sensor

- · Catalytic combusion type • Detecting gas: LP gas (heavier than air)
- Alarm sensitivity: less than 1/4 the lower explosion limit (LEL) · Alarm indication: Red LED indicates instantly, Buzzer rings
- instantly (automatic reset type)
- Power supply: DC24V

# 0KB3



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# 1MF1A





# JP PRODUCTS

# Peripherals

# Local Alarm Bell

# **BD-6-24-11**



- Conventional local alarm bell
   150mm (6")
- Rating: DC24V 10mA
- Sound pressure level: more than 90dB/m

# Remote Tester

# MTT



LP01/0

 Remote tester for compatible NITTAN conventional detectors, PK2B-DP-006, 2KAD3-P, PS2B-PH-014, etc.
 Improve the maintenance efficiently

Sensitivity and contamination check for compatible smoke detectors

· Remote test station for compatible NITTAN conventional

detectors, PK2B-DP-006, 2KAD3-P, PS2B-PH-014, etc.

· lightweight and portable

• 1 zone, drip-proof model

· Testing available with MTT

# Indication Lamp

# PL-R4-LED, PL-R4-W-LED, PL-30R4



PL-R4-LED, PL-R4-W-LED

- Lamp: LED
   Rating: AC/DC 24V, 8.5mA
- PL-R4-W-LED: weather-proof model
- PL-30R4
- Lamp: Bulb
- Rating: DC30V, 66.7mA

# PL-F

- Flat LED indication lamp
- 3mm thickness in recessed mounting
- Lamp: LED
   Rating: AC/DC 24V, 8mA

- LP01/1, LP02/0
- Remote test station for compatible NITTAN conventional detectors, PK2B-DP-006, 2KAD3-P, PS2B-PH-014, etc.
- LP01/1 : 1 zone, standard model
- LP02/0 : 4 zones, standard model
- Testing available with MTT

# Local Combination Box

# SU-01M6L-47SDB



- Local combination box, vertical and recessed mounting type
   Bell: BD-6-24-11
- Indication lamp: PL-R4-LED
- Manual alarm station: 1MF1A
- Plate: SU-01M6L-47SDB-01, Box: SU-445-03 • 475mm length box (47 type)

# SRT-01M6L-47SGB



- Local combination box, vertical and surface mounting type
- Bell: BD-6-24-11
- Indication lamp: PL-R4-LED
   Manual alarm station: 1MF1A
- Plate: SUT-01M6L-47SGB-01, Box: SU-445-03
- 475mm length box (47 type)

# SUT-1MB-40-01



- New local combination box set-plate
   Stylish flat surface design
- Equipped with a bell (BD-6-24-11) and manual station (1MM1W-
- PL)
   Compatible box and terminal
- Box: 410mm length box (40 type)
- SR-410A-06 (surface mounting type) SU-370A-03 (recessed mounting type)
- Terminal unit: T40-001N

% The JP products in this catalogue are equivalent to the products approved with the Japanese standards.

# Local Combination Box Nomenclature

### Ordering code is designed to help in selection of correct unit.

1	2	3	4	-	5	6	7		8	9		10
S	R	Т	W	-	01M	6	L	-	47S	F	-	01

Please select codes from "47 type" for the 475mm model box, and from "40 type" for the 410mm model box respectively in the table below.

No	Codes	Description	47 type	40 type
1	S	Combination Box	0	0
2	R	Surface Mount	0	0
	U	Recessed Mount	0	0
3	Т	Vertical Mount	0	0
	Blank	Horizontal Mount	0	
4	W	Weather Proof	0	0
		Normal	0	0
5	01M/02M	Class 1 or 2 manual alarm station	0	
	1M/RM	·····		0
	6	6 inch (150mm) bell	0	
6	В			0
	DB			0
7	L		0	
_		No indication lamp		0
		Plate length 475mm	0	
8	31S		0	
		Plate length 410mm		0
9		Product Version	0	
		For new combined box set-plate only		0
	01		0	0
		Recessed Mount Box	0	
10		Front Plate w/o devices	0	
		Surface Mount Box	0	
	Blank	Finished Combination Box	0	

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# NITTAN COMPANY, LIMITED

54-5, 1-chome, Sasazuka, Shibuya-ku, Tokyo151-8535, Japan TEL:81-3-5333-7021 FAX:81-3-5333-8615

Nittan implements detailed sales activities and support activities for customers in response to each individual fire prevention issue, with the establishment of 45 branch offices and service centers as well as more than 120 distributors throughout Japan.

Overseas, global coverage encompasses Europe to Africa and the Middle East to Southeast Asia, with a local subsidiary established in the United Kingdom in 1972.

The Nittan brand provides security to sites using state of the art fire prevention technologies.

Distributor