

# LP Gas Detection / Alarm System NV-500

2 days Backup Power Supply Device & easy to operate Multi-Maintenance Functions

## Descriptions

The NV-500 is newly developed gas alarm system with superb backup power supply device and easy to operate multi-maintenance functions, for monitoring gas leakage from LPG manufacturing, storage, and consumption facilities for prevention from an accident due to gas leakage.

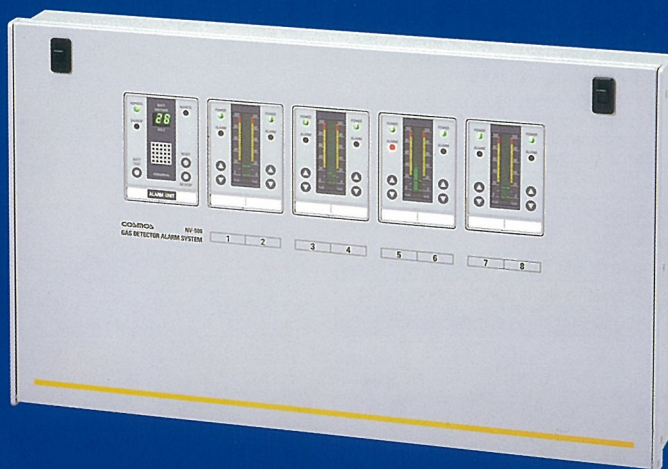
## Features

- ① 2 days backup power supply device ( when 6 diffusion type detector heads are used )
- ② Easy to operate multi-maintenance function ( Auto zero, simple span adjustment, etc. )
- ③ Seismic technology - Designed in consideration of a great earthquake
- ④ Easy to read the dual bar-graphic LCD indicator with back light
- ⑤ Super thin-depth ( 71.5mm ), space-saved indicator / alarm unit design

## NV-500-

2 / 4 / 6 / 8 / 10 / 12 channel ( selective )

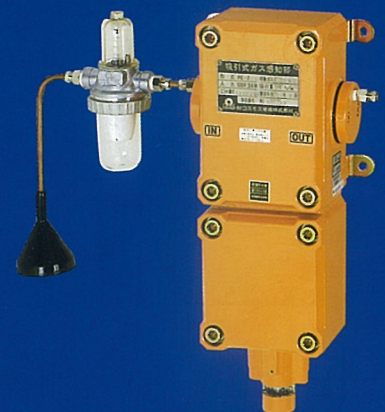
Indicator / Alarm unit with built-in back-up power device



## Detector Head



Diffusion type **KD-5**



Suction type **PE-2DC**

## Optional Accessory



Extension Alarm **EB-5**

Rain / Splash cover



**KW-15**



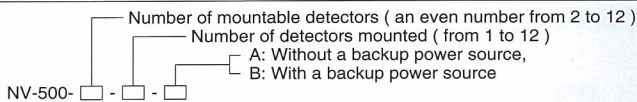
**PW-51**



# NV-500- 2/4/6/8/10/12 channel ( selective )

## Indicator / Alarm unit with built-in back-up power device

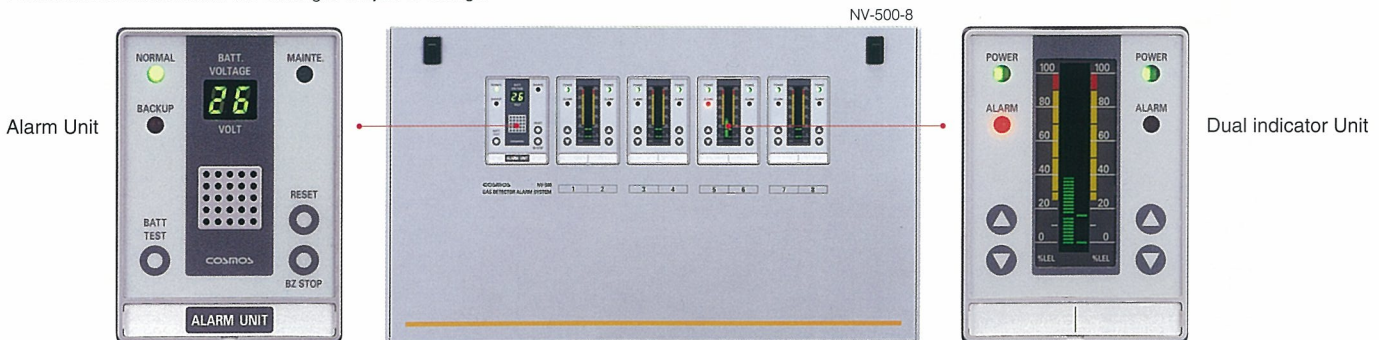
### Specifications

Indicator / Alarm unit Model																
Principle of detection	Catalytic combustion type															
Gas to be detected	LPG leaked in the air ( i-C4H10 standard )															
Detection range	0 to 100% LEL															
Gas concentration indicator	LCD bar graph meter with back light ( with scales to read preset alarm value and peak hold )															
Standard preset alarm value	24% LEL ( iso-butane 0.43vol% ) The alarm point can be freely set using the $\Delta$ / $\nabla$ keys.															
Alarm accuracy	Within $\pm 25\%$ of the preset alarm value															
Response time	Within 30 seconds when gas concentration is 1.6 times more than the preset alarm point ( Suction type: The delay due to sampling pipe length should be exempted. )															
Alarm indication Individual alarm lamp Alarm sound	Red blinks in case of an alarm. Self-holding. Lights up when the buzzer stops. Intermittent alarm sound. Self-holding. Consecutive alarm method.															
Failure indication Individual power lamp Alarm sound	Green lamp goes off and orange lamp lights up when the sensor is disconnected. Intermittent alarm sound. Consecutive alarm method.															
Alarm output terminal Individual contact Individual output Collective contact Buzzer contact External buzzer output Centralized supervisory panel output	1a contact ( Contact capacity: AC100V 2A load resistance ) 1 set each Voltage ( 0-6-12V 20mA or less ) 1 set each 1c contact ( Contact capacity: AC100V 2A load resistance ) 1 set 1a contact ( Contact capacity: AC100V 2A load resistance ) 1 set Voltage intermittent signal ( DC12V 10mA or less ) 1 set Voltage ( 0-6-12V 20mA or less ) 1 set															
External reset terminal	Terminals for external buzzer stop and reset															
Alarm delay	Delay mode can be set individually. ( Delay time: 10 seconds in standard ) Setup at the time of delivery : Not set															
Zero suppression function	Zero suppression mode can be set individually. Setup at the time of delivery : F.S. $\pm 5\%$															
Auto zero adjustment function	Zero point can be automatically adjusted simply by pressing a button.															
Power source	AC100-240V 50/60Hz ( standard ) DC24V $\pm 10\%$ ( needs to be specified )															
Power consumption	Diffusion type: ( 15+3.5 <sub>n</sub> ) VA n: number of detection point Suction type: The above + 4VA per point															
Backup power source ( Unit with a backup power source only. )	<table border="1"> <tr> <td>Battery:</td> <td colspan="2">Gastight lead battery ( 12V2.6Ah<sub>2</sub> )</td> </tr> <tr> <td>Model ( Nos. of detector head )</td> <td>Diffusion type</td> <td>Suction type</td> </tr> <tr> <td>NV-500-12</td> <td>24 hours</td> <td>-</td> </tr> <tr> <td>NV-500-6</td> <td>48 hours</td> <td>15 hours</td> </tr> <tr> <td>Charge time:</td> <td colspan="2">About 24 hours</td> </tr> </table> <p>(*1) Conditions: A cycle of intermittent operation is eleven minutes. No alarm. Voltage output with no load.</p>	Battery:	Gastight lead battery ( 12V2.6Ah <sub>2</sub> )		Model ( Nos. of detector head )	Diffusion type	Suction type	NV-500-12	24 hours	-	NV-500-6	48 hours	15 hours	Charge time:	About 24 hours	
Battery:	Gastight lead battery ( 12V2.6Ah <sub>2</sub> )															
Model ( Nos. of detector head )	Diffusion type	Suction type														
NV-500-12	24 hours	-														
NV-500-6	48 hours	15 hours														
Charge time:	About 24 hours															
Temperature range	0 to 40°C															
Installation	Wall-mounted or recessed															
Painting color	Munsell 2.5PB7.0/1.0															
External alarm barrier	Option : BT-150 intrinsically safe construction ( 2G4 )															
Maintenance function	<p>Maintenance mode 1 ( MAINT E lamp lights up, BATT voltage indicates "≡1". )</p> <p>Alarm lamp: Blinks for about five seconds when the preset alarm value is reached then lights up. Alarm sound: Intermittent sound. Automatically stops. External output: All contact output and voltage output stop. Peak hold: Peak hold is indicated when indication exceeds 10% LEL. Zero suppression: Canceled in the maintenance mode. Auto span: Peak hold value is automatically corrected to the calibration gas concentration value simply by pressing a button.</p> <p>Maintenance mode 2 ( MAINT E lamp lights up, BATT voltage indicates "≡2". )</p> <p>Auto zero and auto span functions are canceled. Peak hold value of maintenance mode 1 is indicated. Analog zero and span adjustments are carried out in this mode.</p>															

Detector head Model	KD-5B-N	PE-2DC
Sampling method	Diffusion	Suction
Gases to be detected	LPG	LPG
Detection range	0 to 100% LEL	0 to 100% LEL
Explosion proof construction	Pressure tight construction d2G4	Pressure tight construction d2G4
Temperature range	-10 to 40°C ( no condensation )	-10 to 40°C ( no condensation )

	External Dimensions (mm)					
	NV-500-2	NV-500-4	NV-500-6	NV-500-8	NV-500-10	NV-500-12
Height	338	338	338	338	338	338
Width	298	421	495	569	643	717
Depth	71.5	71.5	71.5	71.5	71.5	71.5

The information contained in this catalog is subject to change.



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