Single -Channel Gas Detector Monitoring Unit

GMS-1000LB

GASDNA

GAS MONITOR GMS-1000

CONTENTS

Best Detectors,
Best Service

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[Introduction]

GMS-1000-LB is one point gas detector signal receiving unit which can be connected to only one(1) detector. Receiving analogue continuous signal from one (1) detector and converting it into digital signal, GMS-1000-LB provides various alarming and monitoring environment by microprocessor.

Also, GMS-1000-LB converts digital signal into the 4-20㎃ standard current signal for output signal which can be transmitted to various external devices such as PLC, DDC, RECODER, and so on. Using these functions, you can easily construct the gas monitoring system more extensive as well as more comprehensive.

[Features]

◈ Built-in microprocessor can provide various and accurate functions.
◈ Built-in HD(high dissolution) A/D converter accurately transmits the signal.
◈ Compact & simple design enables easy installation.
◈ High/Low two step alarming contact realizes interlocking of various external devices such as fan and so on.
◈ 4 - 20㎃ output signal enables long distance(2.5km) signal transmission.
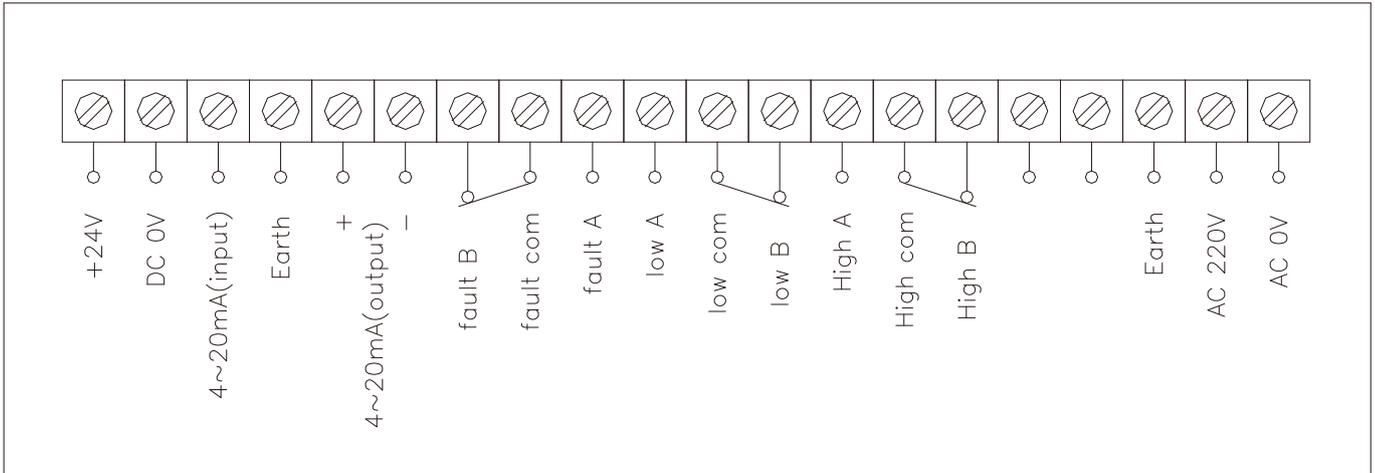◈ Programmable menu enables user's own environment set.
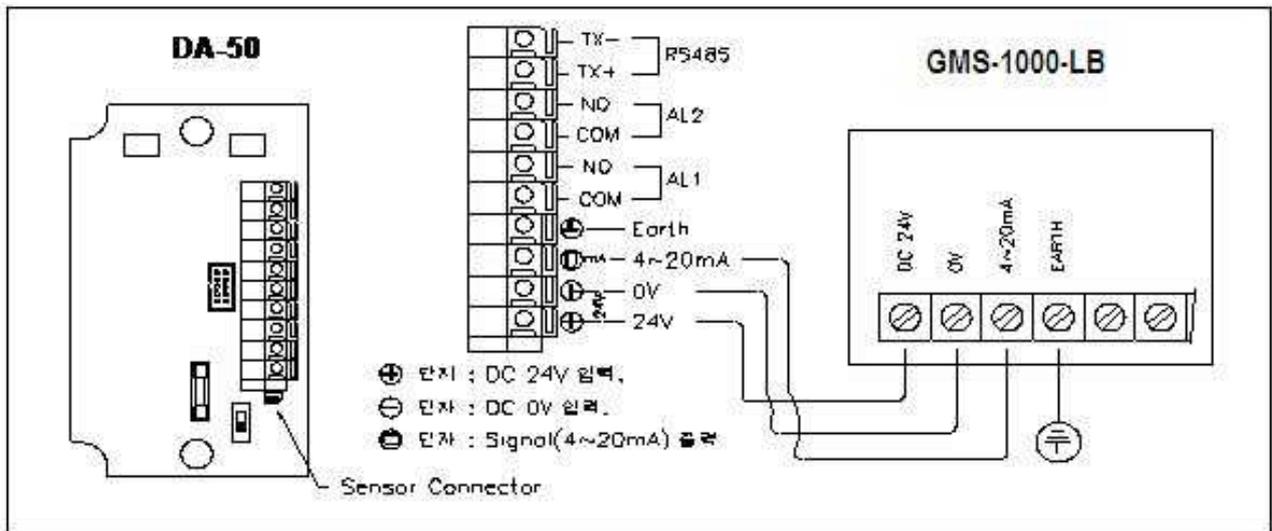
[System Structure]
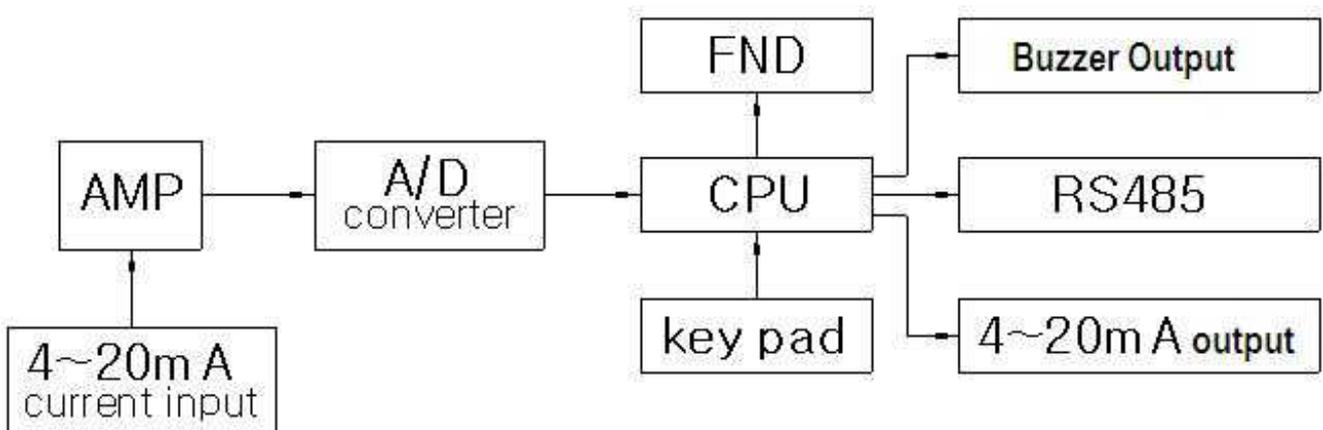
[Specification]

Mounting	Wall mounting
Connecting to detector	One-point type(connectable detectors - 1 units)/1 circuit
Input power	AC 230V/60Hz
Input signal	4 ~ 20㎃ DC/F.S
Output Power	DC 24V(250㎃)
Output signal	4 ~ 20㎃ DC/F.S
Signal Resolution	A/D Converter – 12bit
	D/A Converter - 12bit
Density Indication	F.N.D Display - PPM, %LEL, % set by user
Alarm Indication	Low alarm – 'LOW' LED (red)
	High alarm – 'HIGH' LED (red)
	Trouble alarm – 'FAULT' LED (yellow)
Alarm method	Optical – LED blinking
	Sonic – Buzzer sound (higher than 80㏈)
Set alarm value	HIGH/LOW 2 step alarm set by user
Alarm delay time	0~99 seconds set by user
Alarm release	Manual or automatic release
Alarm output	2 step (HIGH/LOW) alarm relay contact
Operation temperature	-10℃ ~ 50℃
Operation humidity	5 ~ 95%RH (non-condensing)

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[Terminal]

[Wiring] Detector ←——→ Receiver

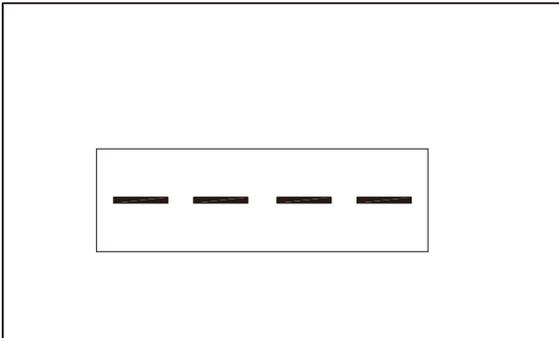(단자: Terminal, 입력: Input, 출력: Output)

[Menu]

Menu	Description
d-Po	Set decimal point [default: 000.0]
L-SC	Set 4mA relative to full scale [default: 0.0]
H-SC	Set 20mA reflative to full scale (0 ~ 9999) [default: 10.0]
AL.TY	Select alarm type (H-H, H-L, L-L) [Default: H-H] <1> [H-H] (1)AL-1 alarm: When measured value is 'AL-1' set value or higher, alarm on. (2)AL-2 alarm: When measured value is 'AL-2' set value or higher, alarm on. <2> [H-L] (1) AL-1 alarm: When measured value is 'AL-1' set value or lower, alarm on. (2) AL-2 alarm: When measured value is 'AL-2' set value or higher, alarm on. <3> [L-L] (1) AL-1 alarm: When measured value is 'AL-1' set value or lower, alarm on. (2) AL-2 alarm: When measured value is 'AL-2' set value or lower, alarm on.
AL-1	Set 'AL-1' value (0 ~ 9999) [default: 1.0]
Dt-T	Set alarm delay time for 'AL-1' & 'AL-2' (0 ~ 99 seconds) [default: 3]
AL-2	Set 'AL-2' value (0 ~ 9999) [default: 3]
Dt-D	Set alarm delay bnd for 'AL-1' & 'AL-2' (0 ~ 99) [default: 3]
A-rE	Set alarm release type – Automatic or Manual realse type [default: Hand] ※ AuTo – Automatic release type ※ Hand – Manual release type
ST-T	Set initialization time from power on (0 ~ 99 seconds) [default: 0]

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[Set Menu Values]

Step	Menu	Select menu	Set menu values	Store the set value
1	Select menu mode − when you press (MODE) key, 'd-PO' menu appears.			
2	d-Po	(ENT) key	(Shift) & (UP) key.	(ENT) key
3	L-SC	(ENT) key	(Shift) & (UP) key.	(ENT) key
4	H-SC	(ENT) key	(Shift) & (UP) key.	(ENT) key
5	AL.TY	(ENT) key	(Shift) & (UP)Key.	(ENT) key
6	AL-1	(ENT) key	(Shift) & (UP) key.	(ENT) key
7	DT-T	(ENT) key	(Shift) & (UP) key.	(ENT) key
8	AL-2	(ENT) key	(Shift) & (UP) key.	(ENT) key
9	DT-D	(ENT) key	(Shift) & (UP) key.	(ENT) key
10	A-rE	(ENT) key	(Shift) & (UP) key.	(ENT) key
11	ST-T	(ENT) key	(Shift) & (UP) key.	(ENT) key
12	Exit	When you finish the above steps, it returns to measuring mode automatically.		

※ If you want to move next step without setting value in current step, please press (MODE) key.

※ Whenever you store any values, menu mode finishes and it returns to measuring mode.

※ If you want to set any values in certain step, please press (MODE) key to move to the designated step.

※ EX) How to set 'AL-1': Pressing (MODE) key, please move move to 'AL-1' menu screen. And then, press (ENT) key to retrieve stored set value. And then, pressing (Shift) & (UP) key, change the set value. And then, press (ENT) key to return to measuring mode.

※ TEST: It is for your testing whether the alarm operates or not.
* How to set: please press (UP) & (DOWN) key continuously at the same time. While pressing two (2) buttons continuously, the value goes up continuously, and when it reaches the highest value within sensible range, it stops. While the value reaches the alarming values, 'LOW' & 'HIGH' alarms automatically on.

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[Error Display] for Line Short

[Dimension]

Front

Side

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