

# Microprocessor AC Voltage & Setting Digital Meter

## MODEL DMV/DMVR

### Features:

- Output/Display/Setting Range User Selectable
- Dual Aux. Power 110/220V AC
- 0.15%FS + 1 Counts. Avg. Typically at 23°C ±3°C
- Analog or Digital RS-485 Output



Ordering : DMV —  —  —  —  Avg. Conversion  
 DMVR —  —  —  —  True RMS Conversion

Input Voltage		Setting Function		Output		Aux. Power	
A	PT X/110V AC	A	Hi-Lo Setting	A	0 ~ 10mA DC	A	AC 110/220V (Dual Power)
B	0~150V AC	B	Hi-Hi Setting	B	0 ~ 20mA DC	C	DC 24V
C	0~600V AC	C	Lo-Lo Setting	C	4 ~ 20mA DC	D	DC 110V
Y	Other	N	None	D	0 ~ 5V DC	E	DC 125V
				E	1 ~ 5V DC	F	AC/DC 85 ~ 265V
				F	RS-485		
				N	None		
				Y	Other		

Specify code number and variable.

Code number: model – input – setting function – output – power

(e.g. DMV – A – A – B – A )

### SPECIFICATIONS:

#### INPUT:

Input Frequency : 48 ~ 400Hz.  
 Input Burden : 0.25VA at 60Hz.  
 Input Over : Normal AC 110V, Voltage Over 500V Continuous ; 1200V 10 Sec/Hour.

#### OUTPUT & DISPLAY:

DC Current: 0 – 20 mA DC

Load resistance drive: output drive 10 VDC maximum

Output Load Resistance

0 – 10 mA :	1000 Ω
0 – 20 mA :	500 Ω
4 – 20 mA :	500 Ω

DC Voltage: 0 – 10 V DC

Load resistance drive: output drive 5 mA maximum

Output Load Resistance

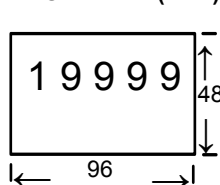
0 – 5 V :	1 KΩ
1 – 5 V :	1 KΩ
0 – 10 V :	2 KΩ

Output Response Time : ≤1 Sec.  
 Output Protection : Without Damage for Output Open or Short Circuit.  
 Digital Output Load : RS-485 Output, 1200,2400,4800,9600,19200 Baud Rate, User Selectable.  
 Display Range : 0.56" Super Rate LED 4-1/2, 5 Digits, ±19999Counts. Display Range User Selectable

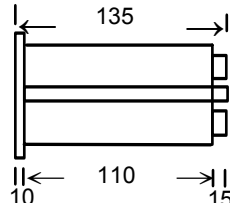
#### INSTALLATION & PERFORMANCE:

Accuracy : 0.15%FS+1 Counts. Avg. Typically at 23°C±3°C.  
 0.25%FS+1 Counts. TRMS Typically at 23°C±3°C.  
 Setting Function : Dual Setting & Contact Points, Setting Function User Selectable.  
 Setting Range : ±19999 Counts User Selectable.  
 Dead Band : 0 ~ 19999 Counts User Selectable.  
 Time Delay : 0 ~ 99 Sec. User Selectable.  
 SPDT Capacity : AC 120V 5A, 250V 3A, DC 24V 3A.  
 Dielectric Strength : 2.6KV AC / Min Between Input / Power / Case.  
 Impulse : 4 KV 1.2x50 uS, ANSI C37.90a / 1983.DIN IEC 255 – 4.  
 Stability : ≤0.2%/Year.  
 Temperature Coefficient : ≤100ppm / °C From 0 ~ 60°C.  
 Operating Condition : -10°C ~ +55°C 20 ~ 95% RH Non-Condensed.  
 Storage Condition : -40°C ~ +75°C 20 ~ 95% RH Non-Condensed.  
 Power Supply : AC or DC ±20%, 50 / 60Hz.  
 Outline Dimension : 1/8 DIN 96W X 48H X 135D mm.  
 Mounting : Panel Flush Mounting.

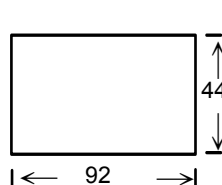
FRONT VIEW( mm)



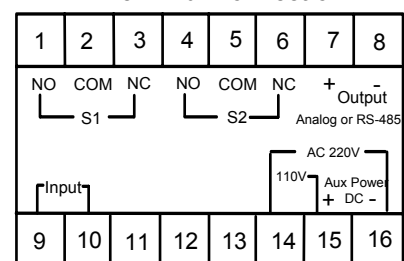
SIDE VIEW

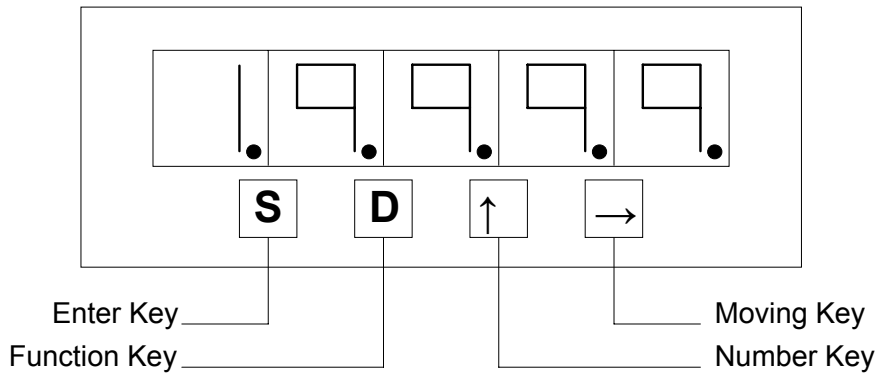


CUT OUT



Terminal Connection





The setting functions divided into two categories :  
 (A) Input/Output/Display Functions  
 (B) Contact Point S1/S2 Setting

Procedures :

- (1) Press "S" key, display "00" blinking
- (2) Press "D" key, enter "01"~"09" functions
- (3) Press "→" key, enter "51"~"59" to setting directly after press
- (4) Press "→" key, to change position.
- (5) Press "↑" key, to change number.

Repeat procedure (1)~(5).

Press "D" and "→" at the same time for QUIT.

PRESS "D" TO SAVE SETTING VALUE AFTER "09".

(A) Input/Output/Display Functions "02"~"09" :

- 02 Lowest display value(OFFSET), - 19999 ~ + 19999.
- 03 Highest display value(GAIN), - 19999 ~ + 19999.
- 04 Decomal point, change decimal point position.
- 05 Analog output range  
Change output value 0~20mA, 4~20mA, 0~10mA, 0~5V, 1~5V, 3~5V, 0~1V.  
\* Display 12~20 means 4~12~20mA, display 3~5 means 1~3~5V.
- 06 Digital output Baud Rate  
1200, 2400, 4800, 9600, 19200.  
\* Display 9200 means 19200.
- 07 Address, 01~99(PC or Host Console Address=0)  
32 devices maximum for RS-485 format.
- 08 Output vs Display rating.  
Step 1 : Press "D" setting output FULL SCALE value.  
Step 2 : Press "D" again setting output ZERO value.
- 09 Special function : Save, Reset, Uni or Bi Directions etc..  
**DISPLAY "99" PRESS "D" TO SAVE "02"~"09" DATA.**

(B) Contact Point S1/S2 Setting "51"~"59" :

	Setting Value	S1	S2	
51 S1 Setting	0~9999.	0	0	0=Lo, 1=Hi,
52 S1 Dead Band	0~9999.	0	0	Lo-Lo
53 S1 Time Delay	0~99 Sec.	1	0	Hi-Lo
54 S2 Setting	Same as 51.	0	1	Lo-Hi
55 S2 Dead Band	Same as 52.	1	1	Hi-Hi
56 S2 Time Delay	Same as 53.			
57 S1, S2 setting condition.				
58 Start Delay Time 0~999 sec., input from zero, no alarming motion within the time				
59 Special Function.	Same as 09.			