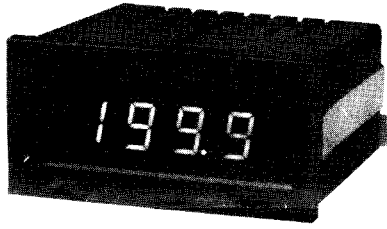


# DC VOLTS-AMPERES HUNG CHANG DIGITAL PANEL METER DP-SERIES

## DIGITAL PANEL METER DP-301, 302 INSTRUCTION MANUAL



### ■ FEATURES

- SMALL, THIN AND LIGHT WEIGHT
- 14.2mm LED
- LOW COST
- START/HOLD FUNCTION
- 110V/220V

### 1. SPECIFICATION

#### ■ DC VOLTAGE MEASUREMENT

Model	Range	Resolution	Input Impedance	Input Protection
DP301-1	±199.9mV	100μV	100MΩ	± 10V
DP301-2	±1.999V	1mV	100MΩ	± 100V
DP301-3	±19.99V	10mV	1MΩ	± 300V
DP301-4	±199.9V	100mV	10MΩ	± 500V
DP301-5	± 600V	1V	10MΩ	± 700V

ACCURACY ± 0.1% RDG ± 2DGT  
(DP301-1, 301-5 ± 0.2% RDG ± 2DGT)

#### ■ DC CURRENT MEASUREMENT

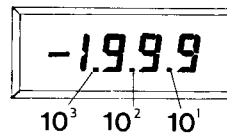
Model	Range	Resolution	Input Impedance	Input Protection
DP302-1	±199.9μA	100nA	10KΩ	± 10mA
DP302-2	±1.999mA	1μA	1KΩ	± 50mA
DP302-3	±19.99mA	10μA	100Ω	±150mA
DP302-4	±199.9mA	100μA	10Ω	±500mA
DP302-5	±1.999A	1mA	0.1Ω	± 3A

ACCURACY ± 0.2% RDG ± 2 DGT  
(DP 302-1, 302-5 ± 0.2% RDG ± 3 DGT)

### 2. SPECIFICATION

- 2.1 FUNCTION: DC VOLTAGE/CURRENT MEASUREMENT
- 2.2 OPERATING METHOD: DUAL SLOP A/D CONVERSION
- 2.3 INPUT CIRCUIT: FLOATING INPUT, AUTO ZERO CIRCUIT
- 2.4 INPUT BIAS CURRENT: 50PA (TYP)
- 2.5 SAMPLING SPEED: APPROX 2.5/SEC.
- 2.6 NOISE ELIMINATION: 40dB (TYP) 50/60Hz
- 2.7 MAXIMUM INDICATION: 1999
- 2.8 OVERRANGE INDICATION: WHEN THE INPUT VALUE EXCEED MAXIMUM INDICATION, "1" OR "-1" WILL BE DISPLAYED.

- 2.9 DISPLAY: 14.2mm HIGH LED DISPLAY (RED COLOR)
- 2.10 POLARITY DISPLAY: "-" IS DISPLAYED AUTOMATICALLY IF THE INPUT SIGNAL BECOMES NEGATIVE.
- 2.11 EXTERNAL CONTROL: HOLD (AT 0V) DECIMAL POINT CAN BE SET AT DESIRED POSITION.

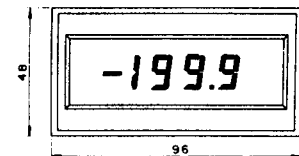


DECIMAL POINT	CONNECTOR PIN NUMBER
10 <sup>1</sup>	13 - 8
10 <sup>2</sup>	12 - 8
10 <sup>3</sup>	11 - 8

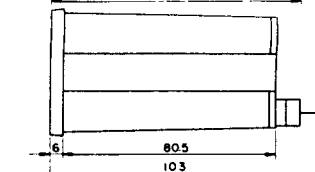
- 2.12 OPERATING TEMPERATURE: 0° ~ 50°C
- 2.13 POWER SUPPLY: 110V/220V (CHANGED WITH INTERNAL JUMPER)
- 2.14 DIMENSIONS: 96mm(W) × 48mm(H) × 86.5mm(D) (DIN SIZE)
- 2.15 WEIGHT: APPROX 250g
- 2.16 ACCESSORY: CONNECTOR, BRACKET, BRACKET BIS X2, INSTRUCTION MANUAL
- 2.17 REMARK:

### 3. MOUNTING DIMENSION PANEL CUT OUT

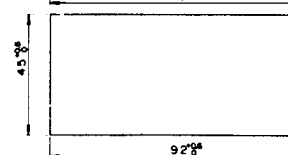
#### 3.1 FRONT



#### 3.2 SIDE



#### 3.3 PANEL CUT OUT

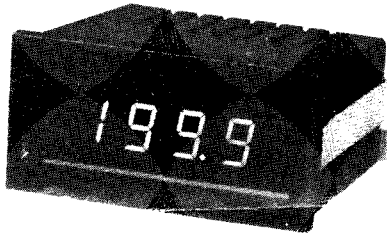


### 4. CONNECTOR DIAGRAM



HUNG CHANG DIGITAL PANEL METER DP-SERIES

DIGITAL PANEL METER DP-303, 304 INSTRUCTION MANUAL



■ FEATURES

- SMALL, THIN AND LIGHT WEIGHT
- LOW COST
- START/HOLD FUNCTION
- 110V/220V
- 14.2mm LED

1. SPECIFICATION

■ AC VOLTAGE MEASUREMENT

Model	Range	Resolution	Input Impedance	Input Protection
DP303-1	199.9mV	100μV	100MΩ	10V
DP303-2	1.999V	1mV	10 MΩ	100V
DP303-3	19.99V	10mV	10MΩ	300V
DP303-4	199.9V	100mV	10MΩ	700V
DP301-5	600V	1V	10MΩ	700V

ACCURACY ± 0.2% RDG ± 3DGT  
(DP303-1, 303-5 ± 0.3% RDG ± 3DGT)

■ AC CURRENT MEASUREMENT

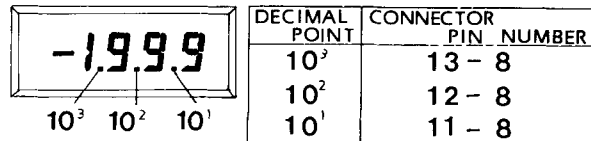
Model	Range	Resolution	Input Impedance	Input Protection
DP304-1	199.9μA	100nA	10KΩ	10mA
DP304-2	1.999mA	1μA	1KΩ	50mA
DP304-3	19.99mA	10μA	100Ω	150mA
DP304-4	199.9mA	100μA	10Ω	500mA
DP304-5	1.999A	1mA	0.1Ω	3A

ACCURACY ± 0.2% RDG ± 3 DGT  
(DP 304-1, 304-5 ± 0.3% RDG ± 3 DGT)

2. SPECIFICATION

- 2.1 FUNCTION: AC VOLTAGE/CURRENT MEASUREMENT
- 2.2 OPERATING METHOD: DUAL SLOP A/D CONVERSION
- 2.3 INPUT CIRCUIT: FLOATING INPUT, AUTO ZERO CIRCUIT
- 2.4 INPUT BIAS CURRENT: 50PA (TYP)
- 2.5 SAMPLING SPEED: APPROX 2.5/SEC.
- 2.6 NOISE ELIMINATION: 40dB (TYP) 50/60Hz
- 2.7 MAXIMUM INDICATION: 1999
- 2.8 OVERRANGE INDICATION: WHEN THE INPUT VALUE EXCEED MAXIMUM INDICATION, "1" OR "-1" WILL BE DISPLAYED.

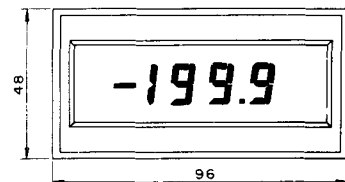
- 2.9 DISPLAY: 14.2mm HIGH LED DISPLAY (RED COLOR)
- 2.10 EXTERNAL CONTROL: HOLD (AT 0V) DECIMAL POINT CAN BE SET AT DESIRED POSITION.



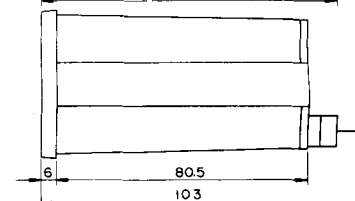
- 2.11 OPERATING TEMPERATURE: 0° ~ 50°C
- 2.12 POWER SUPPLY: 110V/220V (CHANGED WITH INTERNAL JUMPER)
- 2.13 DIMENSIONS: 96mm(W)×48mm(H)×86.5mm(D)  
(DIN SIZE)
- 2.14 WEIGHT: APPROX 250g
- 2.15 ACCESSORY: CONNECTOR, BRACKET, BRACKET BIS X2, INSTRUCTION MANUAL
- 2.17 REMARK:

3. MOUNTING DIMENSION PANEL CUT OUT

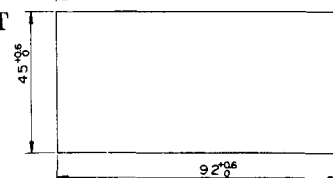
3.1 FRONT



3.2 SIDE



3.3 PANEL CUT OUT



4. CONNECTOR DIAGRAM

