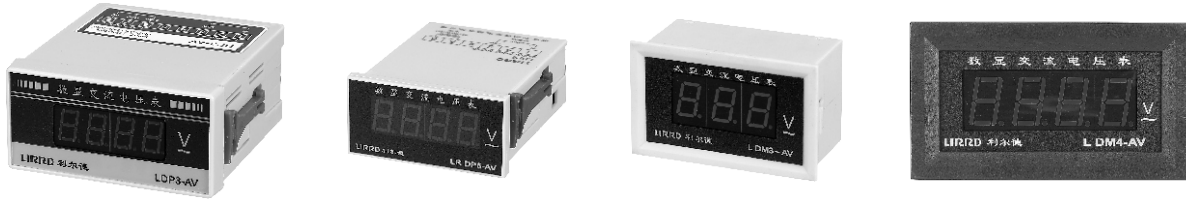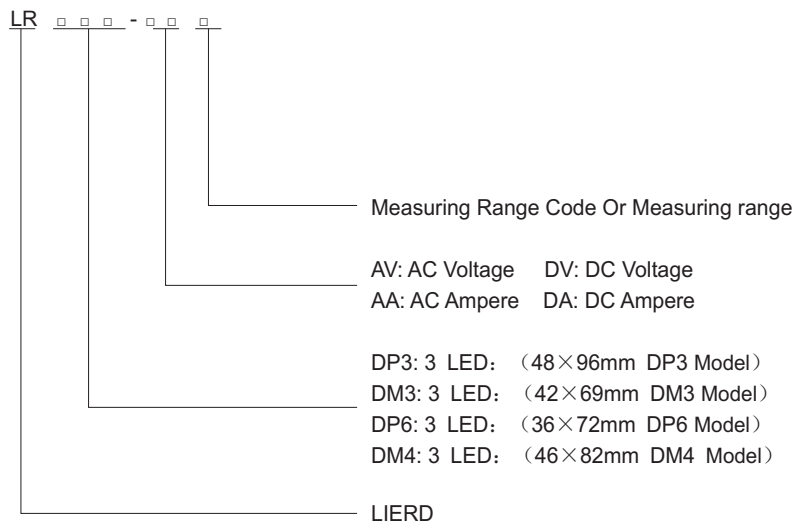## LRD Voltmeter, ammeter series

Features

□ Conversion ratio 2.5/s
□ Zero adjustment (Fixed decimal point)
□ Display range ±1999 (LDP3-□ □) (LDP6-□ □)

Type and meaning

LR □ □ □ - □ □ □

Measuring Range Code Or Measuring range

AV: AC Voltage   DV: DC Voltage
AA: AC Ampere   DA: DC Ampere

DP3: 3 LED：（48×96mm DP3 Model）
DM3: 3 LED：（42×69mm DM3 Model）
DP6: 3 LED：（36×72mm DP6 Model）
DM4: 3 LED：（46×82mm DM4 Model）

LIERD

Power source

Model & Spec.	Operating voltage
LRDP3 series	AC 110/220V
LRDP6 series	AC/DC 85~265V Input free
LRDM3 series	AC/DC 85/265V Input free orAC/DC 8~13.5V Input free
LRDM4 series	DC5V/70mA

AC digital voltmeter

Model	Range	Resolving power DP3, DP6	Input Resistance	PT	Measuring accuracy	Max. input
LDP□ -AV0.2	200mV	100mV	10MΩ	Direct input	±0.5%F.S±2Digit	5V (Peak)
LDP□ -AV2	2V	1mV	10MΩ	Direct input	±0.5%F.S±2Digit	10V (Peak)
LDP□ -VV20	20V	10mV	10MΩ	Direct input	±0.5%F.S±2Digit	50V (Peak)
LDP□ -LAV200	200V	100mV	10MΩ	Direct input	±0.5%F.S±2Digit	500V (Peak)
LDP□ -LAV600	600V	1V	10MΩ	Direct input	±1%F.S±2Digit	1000V (Peak)
LDP□ -AV3K	3KV	10V	10MΩ	3KV:100V	±1%F.S±2Digit	1000V (Peak)
LDP□ -AV10K	10KV	10V	10MΩ	10KV:100V	±0.5%F.S±2Digit	1000V (Peak)

AC digital ammeter

Model	Range	Resolving power DP3, DP6	PT	Measuring accuracy	Max. input
LDP□-AA0.2	200mA	100uA	Direct input	±0.5%F.S±2Digit	500mA
LDP□-AA2	2A	1mA	Direct input	±0.5%F.S±2Digit	5A
LDP□-AA20	20A	10mA	20A:5A	±0.5%F.S±2Digit	1.2F.S
LDP□-AA50	50A	100mA	50A:5A	±1%F.S±2Digit	1.2F.S
LDP□-AA100	100A	100mA	100A:5A	±0.5%F.S±2Digit	1.2F.S
LDP□-AA150	150A	100mA	150A:5A	±0.5%F.S±2Digit	1.2F.S
LDP□-AA200	200A	100mA	200A:5A	±0.5%F.S±2Digit	1.2F.S
LDP□-AA500	500A	1A	500A:5A	±1%F.S±2Digit	1.2F.S
LDP□-AA1000	1000A	1A	1000A:5A	±0.5%F.S±2Digit	1.2F.S
LDP□-AA1500	1500A	1A	1500A:5A	±0.5%F.S±2Digit	1.2F.S
LDP□-AA2000	2000A	1A	2000A:5A	±0.5%F.S±2Digit	1.2F.S

DC digital voltmeter

Model	Range	Resolving power DP3, DP6	Input Resistance	Measuring accuracy	Max. input
LDP□-DV0.2	200mV	100uV	10MΩ	±0.5%F.S±2Digit	10V
LDP□-DV2	2V	1mV	10MΩ	±0.5%F.S±2Digit	100V
LDP□-DV20	20V	10mV	10MΩ	±0.5%F.S±2Digit	500V
LDP□-DV200	200V	100mV	10MΩ	±0.5%F.S±2Digit	750V
LDP□-DV500	500V	1V	10MΩ	±1%F.S±2Digit	800V

DC digital ammeter

Model	Range	Resolving power DP3, DP6	PT	Measuring accuracy	Max. input	Internal impedance
LDP□-DA0.0002	0.2mA	100uA	Direct input	±0.5%F.S±2Digit	10mA	1KW
LDP□-DA0.002	2mA	1mA	Direct input	±0.5%F.S±2Digit	100mA	100W
LDP□-DA0.02	20mA	10mA	Direct input	±0.5%F.S±2Digit	500mA	10W
LDP□-DA02	200mA	100mA	Direct input	±0.5%F.S±2Digit	1A	1W
LDP□-DA2	2A	1mA	Direct input	±0.5%F.S±2Digit	5A	0.1W
LDP□-DA20	20A	10mA	20A:75mV	±0.5%F.S±2Digit	1.5F.S	5MW
LDP□-DA30	30A	100mA	30A:75mV	±1%F.S±2Digit	1.5F.S	5MW
LDP□-DA50	50A	100mA	50A:75mV	±1%F.S±2Digit	1.5F.S	5MW
LDP□-DA100	100A	100mA	100A:75mV	±0.5%F.S±2Digit	1.5F.S	5MW
LDP□-DA150	150A	100mA	150A:75mV	±0.5%F.S±2Digit	1.5F.S	5MW
LDP□-DA200	200A	100mA	200A:75mV	±0.5%F.S±2Digit	1.5F.S	5MW
LDP□-DA300	300A	1A	300A:75mV	±1%F.S±2Digit	1.5F.S	5MW
LDP□-DA500	500A	1A	500A:75mV	±1%F.S±2Digit	1.5F.S	5MW
LDP□-DA1000	1000A	1A	1000A:75mV	±0.5%F.S±2Digit	1.5F.S	5MW
LDP□-DA1500	1500A	1A	1500A:75mV	±0.5%F.S±2Digit	1.5F.S	5MW
LDP□-DA2000	2000A	1A	2000A:75mV	±0.5%F.S±2Digit	1.5F.S	5MW

lnstruction

(1) Measuring accuracy in ambient temperature of 20±2℃, humidity of 45% to 75% R.H.

(2) The list of item CT and PT mode is basic model, the other scale for example, rated current 10A, 15A, 30A, 75A, 250A, 1500A……, rated current 1KV, 6KV, 1KV, 35KV, 110KV……, it according to customer offers.

(3) With AC CT of the second ampere is 5A, AC PT of the second voltage is 100V, DC divider of the second voltage is 75mV. If the second ampere and voltage is other value, customer need to remark.

(4) According to customer requirement, the meter can be offered with CT or PT.

(5) The using scale of the meter can be adjusted by pushing the decimal point setting switch and the scale setting switch of the meter.

Technical parameters

Input mode A/D convert	Single-end Input Dual slope
Sampling time	Abt. 2.5 sec
Frequency range	40～200Hz (Only for AC)
Over input indication	"1" or "1" Only"-"display
Polarity display	(only DC)
Display	Red LED (14.2mmH)
Aux. power supply	AC 110/220V±10%, 50/60Hz
Power consumption	≤4.5VA
Dielectric withstand voltage	AC 1500V 1min
Insulation resistance	DC 500V ≥100M
Weight	≤280g

Function characteristics of frequency meter series

(1) Product is mainly used for measuring the frequency of kinds of industrial power.
(2) LED high bright display. With visual reading and high resolution power.
(3) Level range of input signal 75~300VAC or 200~480VAC.
(4) Photoelectric isolating of input signal, with strong anti-interference capability.
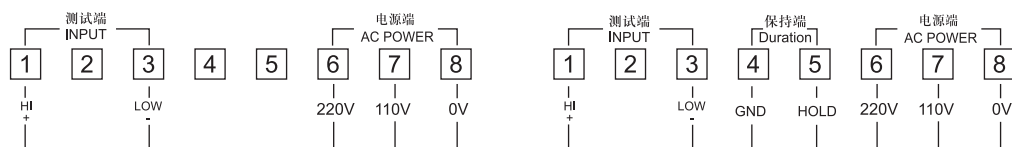
Technical parameters

Classification	Digital type industrial power frequency display meter			
Model	DP3-Hz	DP6-Hz	DM3-Hz	DM4-Hz
Operating voltage	Input free, between 85~285VAC/DC other supply voltage upon request			
Input signal	75~300VAC or 200~480VAC，Photoelectric isolating			
Outline dimension	48W x 96H x 112D	36W x 72H x 97D	42W x 69H x 35D	46W x 82H x 18D
Precision grade	±0.05%±1(23℃±5℃)			
Measuring range of frequency	0.1Hz~999.9Hz			
LED display mode	4 bits high bright, LED display of 0.56 digit height, decimal point fixed No. 2 bit LED			
Power consumption	Less than 4VA	Less than 4VA	Less than 1.5VA	Less than 1.2VA
Installation mode	Panel built-in type			
(mm) Hole dimension	45W x 91H	31W x 66.5H	38W x 65H	39.2W x 75H
Anti-interference capability	AC2kV or DC500V impuise width, frequency meter works normally under 1uS disturbance			
Operating environment	Ambient temperature :-10~+50℃, Environmental humidity:35~85%RH			

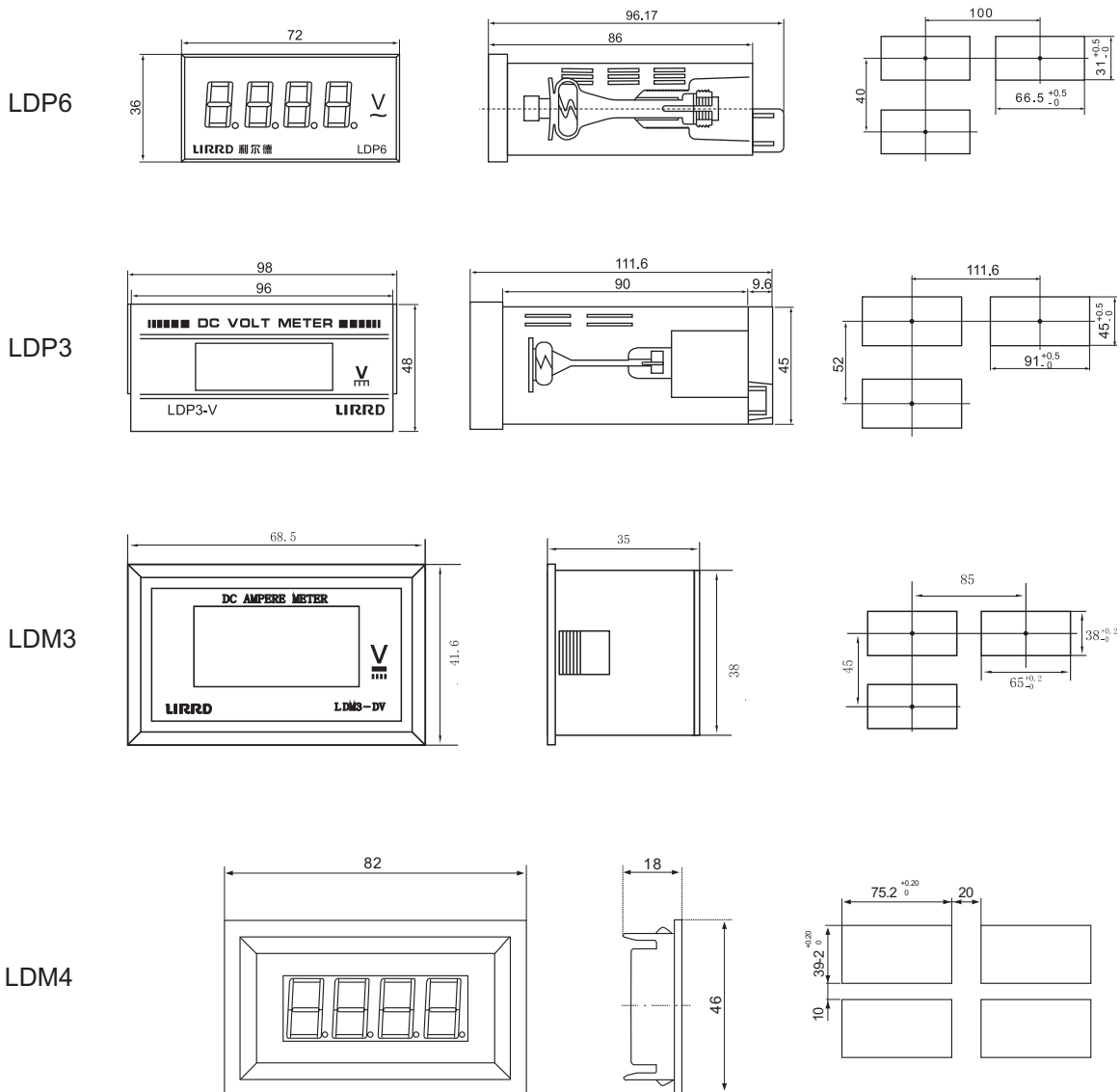## Terminal connection

LDP6

LDP3

LDM3

The outside dimensions and mounting

LDP6

72
36
LDP6

96.17
86

100
40
31 $^{+0.5}_{-0}$
66.5 $^{+0.5}_{-0}$

LDP3

98
96
DC VOLT METER
V
LDP3-V
48

111.6
90
9.6
45

111.6
52
45 $^{+0.5}_{-0}$
91 $^{+0.5}_{-0}$

LDM3

68.5
DC AMPERE METER
V
LIRRD   LDM3-DV
41.6

35
38

85
45
38 $^{+0.2}_{-0}$
65 $^{+0.2}_{-0}$

LDM4

82

18
46

75.2 $^{+0.20}_{0}$
20
39.2 $^{+0.20}_{0}$
10

Notice for operation and storage

(1) Use in ambient temperature of 0℃ to40℃, relative humidity less then 85% R.H.

(2) The meter calibration interval time is one year.

(3) Avoid using instruments in an area surrounded by vibrations or shock, dust, organic corrosive materials of gas.

(4) lf the input signal with high-frequency noise, use a High-pass FILTER IN THE INPUT SIGNAL LINE.

(5) lnput wire should not be too long. lf measured signal and meter is long, please use a 2-core shielded cable, and connect its outer shield to the LO side at a signal source.

(6) lf the digit meter relay is not used for a long time. Please connect power supply once every three months, not less than 4 hours each time.

(7) Long time for storing the meter in the shade with no high light-line with temperature of -10℃ to 70℃, and humidity less than 60% Don't contact with organic solvents or gas.