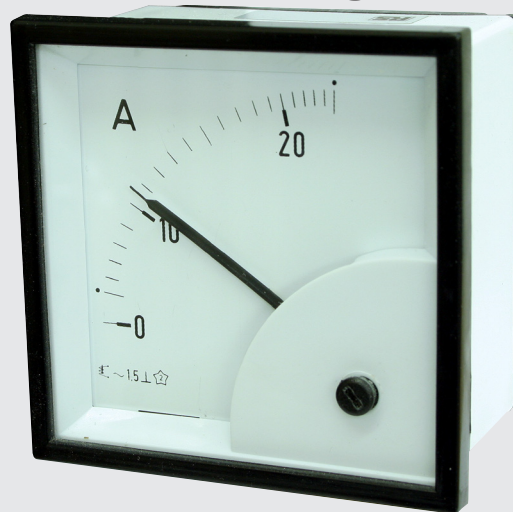


# KEP-APM SERIES

*LCD Digital Panel Meters  
Replaces Analog Meters*

## Traditional Moving Coil Meter



**First Invented In The 19th Century.**

## The New KEP-APM “Analog Effect” Digital Panel Meters

Unique and flexible. The custom curved 40 segment display is as quick and easy to read as any analog instrument, with the added precision of a digital display. Available in a wide range of voltage and current inputs. Precise measurement that is simple, modern and reliable.



KEP-APM-DCV



KEP-APM-ACV



KEP-APM-ACA



KEP-APM-DCA



KEP-APM-DCMA



KEP-APM-ACMA



KEP-APM-ACUA



KEP-APM-DCUA

## Welcome To The 21<sup>st</sup> Century!

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# KEP-APM ACV/DCV

## LCD Digital Volt Meters Measures ACV or DCV



KEP-APM-DCV



KEP-APM-ACV

### KEPAPMDCV Features

- Powered from measured voltage between 6-300VDC.
- 4 digit display and curved bargraph display.
- Reading, DCV accuracy +/- 2%. Measures to 2 decimal places.
- DC Volts: KEPAPMDCV
- Measured VOLTAGE input from 6-300VDC. A minimum voltage of 6VDC is required.
- Externally powered green backlight, Separate 12 or 24VDC power required.
- Measurement connection using a 4 way 7.5mm pitch screw terminal block.

### Specifications

Supply Voltage	6-300VDC
Display	3 <sup>3/4</sup> digit LCD, 12mm characters, 40 segment curved display
Protection	NEMA4X / IP65 front panel only
Display response time	15mSec
Supply current	3mA typical
Sample rate	3 per second
Measuring Range	6-300VDC
Backlight current	120mA max
Accuracy	Typical 2%
Operating Temp.	-10°C to +50°C
Storage Temp.	-20°C to +70°C.

### KEPAPMACV Features

- Powered from measured voltage between 12-440VAC.
- 4 digit display and curved bargraph display.
- Reading, ACV accuracy +/- 2%. Measures to 2 decimal places.
- AC Volts: KEPAPMACV
- Measured VOLTAGE input from 12-440VAC. A minimum voltage of 12VAC is required.
- Externally powered green backlight, Separate 12 or 24VDC power required.
- Measurement connection using a 4 way 7.5mm pitch screw terminal block.

### Specifications

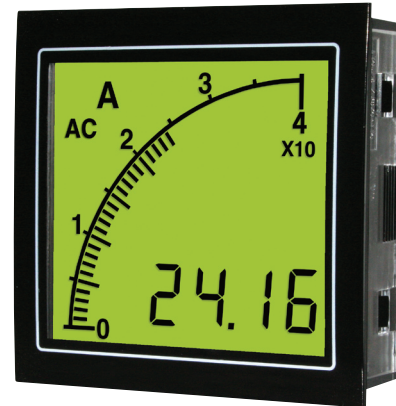
Supply Voltage	12-440VAC RMS
Display	3 <sup>3/4</sup> digit LCD, 12mm characters, 40 segment curved display
Protection	NEMA4X / IP65 front panel only
Display response time	15mSec
Supply current	3mA typical
Sample rate	3 per second
Measuring Range	12-440VAC
Backlight current	120mA max
Accuracy	Typical 2%
Operating Temp.	-10°C to +50°C
Storage Temp.	-20°C to +70°C.
AC Measurement	True RMS
Op. Freq. Range	40 to 650Hz ±2% 650 to 2700Hz ±5%

# KEP-APM ACA/DCA

## LCD Digital Ammeters Measures AC or DC Amps



KEP-APM-DCA



KEP-APM-ACA

### KEPAPMDCA Features

- Powered from measured current with voltage of 6-300VDC.
- 4 digit display and curved bargraph display.
- Reading, DCA accuracy +/- 2%. Measures to 2 decimal places.
- DC Amps: KEPAPMDCA
- Measured CURRENT input from 0.1A-40.0A.
- A minimum voltage of 6VDC is required.
- Externally powered green backlight, Separate 12 or 24VDC power required.
- Measurement connection using a 4 way 7.5mm pitch screw terminal block.

### Specifications

Supply Voltage	6-300VDC
Display	3 <sup>3/4</sup> digit LCD, 12mm characters, 40 segment curved display
Protection	NEMA4X / IP65 front panel only
Display response time	15mSec
Supply current	3mA typical
Sample rate	3 per second
Measuring Range	0.1A-40.0A
Backlight current	120mA max
Accuracy	Typical 2%
Operating Temp.	-10°C to +50°C
Storage Temp.	-20°C to +70°C.

### KEPAPMACA Features

- Powered from measured current with voltage of 12-440VAC.
- 4 digit display and curved bargraph display.
- Reading, ACA accuracy +/- 2%. Measures to 2 decimal places.
- AC Amps: KEPAPMACA
- Measured CURRENT input from 0.1A-40.0A.
- A minimum voltage of 12VAC is required.
- Externally powered green backlight, Separate 12 or 24VDC power required.
- Measurement connection using a 4 way 7.5mm pitch screw terminal block.

### Specifications

Supply Voltage	12-440VAC RMS
Display	3 <sup>3/4</sup> digit LCD, 12mm characters, 40 segment curved display
Protection	NEMA4X / IP65 front panel only
Display response time	15mSec
Supply current	3mA typical
Sample rate	3 per second
Measuring Range	0.1A-40.0A
Backlight current	120mA max
Accuracy	Typical 2%
Operating Temp.	-10°C to +50°C
Storage Temp.	-20°C to +70°C.
Op. Freq. Range	40 to 650Hz ±2% 650 to 2700Hz ±5%

# KEP-APM ACMA/DCMA

## LCD Digital Milli Ameters Measures AC mA or DC mA



KEP-APM-DCMA



KEP-APM-ACMA

### KEPAPMDCMA Features

- Powered from measured current with voltage of 6-300VDC.
- 4 digit display and curved bargraph display.
- Reading, DCMA accuracy +/- 2%. Measures to 2 decimal places.
- DC Milliamps: KEPAPMDCMA
- Measured CURRENT input from 0.1mA-400.0mA.
- A minimum voltage of 6VDC is required.
- Externally powered green backlight, Separate 12 or 24VDC power required.
- Measurement connection using a 4 way 7.5mm pitch screw terminal block.

### Specifications

Supply Voltage	6-300VDC
Display	3 <sup>3/4</sup> digit LCD, 12mm characters, 40 segment curved display
Protection	NEMA4X / IP65 front panel only
Display response time	15mSec
Supply current	3mA typical
Sample rate	3 per second
Measuring Range	0.1mA-400.0mA
Backlight current	120mA max
Accuracy	Typical 2%
Operating Temp.	-10°C to +50°C
Storage Temp.	-20°C to +70°C.

### KEPAPMACMA Features

- Powered from measured current with voltage of 12-440VAC.
- 4 digit display and curved bargraph display.
- Reading, DCMA accuracy +/- 2%. Measures to 2 decimal places.
- AC Milliamps: KEPAPMACMA
- Measured CURRENT input from 0.1mA-400.0mA.
- A minimum voltage of 12VAC is required.
- Externally powered green backlight, Separate 12 or 24VDC power required.
- Measurement connection using a 4 way 7.5mm pitch screw terminal block.

### Specifications

Supply Voltage	12-440VAC RMS
Display	3 <sup>3/4</sup> digit LCD, 12mm characters, 40 segment curved display
Protection	NEMA4X / IP65 front panel only
Display response time	15mSec
Supply current	3mA typical
Sample rate	3 per second
Measuring Range	0.1mA-400.0mA
Backlight current	120mA max
Accuracy	Typical 2%
Operating Temp.	-10°C to +50°C
Storage Temp.	-20°C to +70°C.
Op. Freq. Range	40 to 650Hz ±2% 650 to 2700Hz ±5%

# KEP-APM ACUA/DCUA

## LCD Digital Micro Ammeters Measures AC $\mu$ A or DC $\mu$ A



KEP-APM-DCUA



KEP-APM-ACUA

### KEPAPMDCUA Features

- Powered from measured current with voltage of 6-300VDC.
- 4 digit display and curved bargraph display.
- Reading, DCUA accuracy +/- 2%. Measures to 1 decimal places.
- DC Microamps: KEPAPMDCUA
- Measured CURRENT input from 1 $\mu$ A-4000 $\mu$ A.
- A minimum voltage of 6VDC is required.
- Externally powered green backlight, Separate 12 or 24VDC power required.
- Measurement connection using a 4 way 7.5mm pitch screw terminal block.

### Specifications

Supply Voltage	6-300VDC
Display	3 <sup>3/4</sup> digit LCD, 12mm characters, 40 segment curved display
Protection	NEMA4X / IP65 front panel only
Display response time	15mSec
Supply current	3mA typical
Sample rate	3 per second
Measuring Range	1 $\mu$ A-4000 $\mu$ A
Backlight current	120mA max
Accuracy	Typical 2%
Operating Temp.	-10°C to +50°C
Storage Temp.	-20°C to +70°C.

### KEPAPMACUA Features

- Powered from measured current with voltage of 12-440VAC.
- 4 digit display and curved bargraph display.
- Reading, ACUA accuracy +/- 2%. Measures to 1 decimal places.
- AC Microamps: KEPAPMACUA
- Measured CURRENT input from 1 $\mu$ A-4000 $\mu$ A.
- A minimum voltage of 12VAC is required.
- Externally powered green backlight, Separate 12 or 24VDC power required.
- Measurement connection using a 4 way 7.5mm pitch screw terminal block.

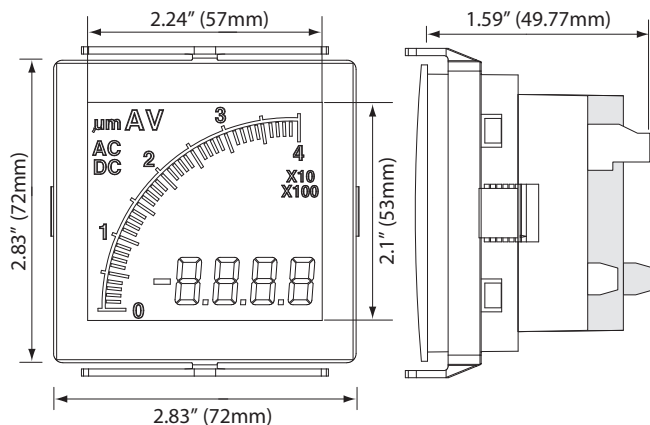
### Specifications

Supply Voltage	12-440VAC RMS
Display	3 <sup>3/4</sup> digit LCD, 12mm characters, 40 segment curved display
Protection	NEMA4X / IP65 front panel only
Display response time	15mSec
Supply current	3mA typical
Sample rate	3 per second
Measuring Range	1 $\mu$ A-4000 $\mu$ A
Backlight current	120mA max
Accuracy	Typical 2%
Operating Temp.	-10°C to +50°C
Storage Temp.	-20°C to +70°C.
Op. Freq. Range	40 to 650Hz $\pm$ 2% 650 to 2700Hz $\pm$ 5%

## Common Features for KEP-APM Series

- Digital and analog readout for precise reading.
- Linear scale even on the AC versions. AC analog meters do not have a linear scale.
- Same panel cutout as the analog meters. Will directly replace the analog type meter.
- Screw terminals for easy connection of wires. Analog meters have clamps or threaded bolts which are more difficult to connect to.
- Fully insulated connection terminals. Analog connections are not usually insulated.
- The meters are fully readable even in the dark (backlit version). It's difficult to read analog meters in the dark.
- Single easy fit ratchet style fixing clip. 72 size analog meters usually have 2 screw clamps which are awkward to fit in tight spaces.
- More robust against vibrations. There is no pointer to damage.
- Auto zero. The analog meters have to be manually adjusted to zero.
- NEMA4X / IP65 Sealed smooth front face for easy cleaning. Analog units have a protruding bezel and an adjustment screw which can trap dirt.

## Dimensions



**72mm x 72mm DIN with 68mm x 68mm panel cut out.**

## Ordering Information

<u>Model No.</u>	<u>Description</u>
KEPAPMDCV	DC Volt Meter
KEPAPMACV	AC Volt Meter
KEPAPMDCA	DC Ammeter
KEPAPMACA	AC Ammeter
KEPAPMDCMA	DC Milli Ammeter (mA)
KEPAPMACMA	AC Milli Ammeter (mA)
KEPAPMDCUA	DC Micro Ammeter ( $\mu$ A)
KEPAPMACUA	AC Micro Ammeter ( $\mu$ A)

The green backlight option is supplied on all models. Separate 12 or 24VDC power is required. If the backlight is not needed, leave the backlight terminals disconnected.

