Digital Advanced Panel Meters

Models Available

APM-AMP AC/DC Digital Ammeter
APM-VOLT AC/DC Digital Voltmeter
APM-FREQ Digital Frequency Meter
APM-PROC Digital DC Process Meter

Product Features

- 40 segment bar graph display
- Large 4 digit display
- Dynamic coloured backlight
- User adjustable brightness and colour
- High contrast, anti-glare LCD screen
- Wide viewing angle
- Custom annunciators
- Positive or negative display options
- Optional two independent outputs
- IP65 supplied complete with gasket

The APM meters incorporate a 40 segment analogue display together with a 4 digit digital display providing both an accurate reading combined with a simple, visual indication. These panel mounting meters have a user selectable red, green or white LED backlight and are 12-24Vac/dc powered.

They can be connected to the USB port on a PC and configured using the free software, or for some standard ranges, through DIP switches on the rear of the meter. The meters are housed in a compact DIN72 enclosure and are sealed to a protection rating of IP65.

All meters are available with either black digits/markings on a coloured background (positive display) or coloured digits/markings on a black background (negative display) and have an option of two independent outputs, programmable as setpoints or analogue outputs.

For measurement of AC current, AC voltage, frequency and process signals

General Specification

Power Supply:
- 12-24Vac/dc

Power Consumption:
- 80mA (backlight off)
- 160mA (backlight on)

Display:
- 4 digit, 0.47" high
- 40 segment bar graph
- 4 characters for message/title
- Red, green or white backlight (selectable)
- Positive or negative display (specify)

Isolation:
- Power supply & voltage input: 600V
- Power supply & current input: 2kV

Open Collector Output:
- 24V max., 500mA max., 0.6W max.

4-20mA Analogue Output:
- Accuracy 0.5%
- Resolution 0.02mA

Enclosure Code:
- Case IP65, supplied with gasket

Operating Temperature:
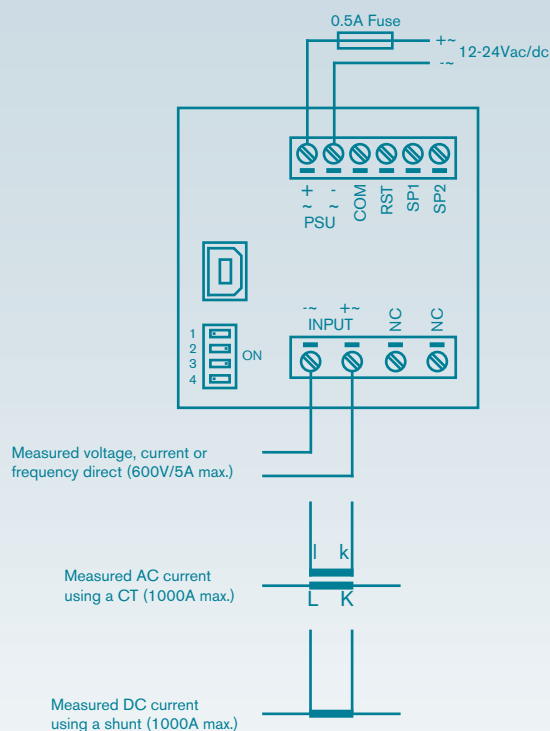- -10°C to +60°C

Storage Temperature:
- -40°C to +70°C

Weight:
- 180g

Markings:
- CE marked
- UL and cUL (pending)

Connections

Measured voltage, current or frequency direct (600V/5A max.)

Measured AC current using a CT (1000A max.)

Measured DC current using a shunt (1000A max.)

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Ordering information

Model	Code	Description
	APM-AMP	72 x 72mm Digital AC/DC Ammeter
	APM-VOLT	72 x 72mm Digital AC/DC Voltmeter
	APM-FREQ	72 x 72mm Digital Frequency meter
	APM-PROC	72 x 72mm Digital DC Process meter

Display	Code	Description
	-AP	Positive Display
	-AN	Negative Display

Outputs	Code	Description
	N	None (N/A for APM-PROC)
	O	Two Independent Outputs Programmable as Setpoints or Analogue Outputs

Example	APM-VOLT-APO	

Dimensions

57.0   53.0   72.0

53.0   72.0

Max. Panel Thickness 7mm
Panel Cutout 68mm square

All dimensions in mm

Display Options (Selectable)

Positive White

Positive Green

Positive Red

Negative White

Negative Green

Negative Red

Specification (Ammeter)

Input Current, In:
− 0-5A direct or CT operated

CT Ratio (Programmable):
− 5/5A to 1000/5A

Shunt Ratio (Programmable):
− Up to 1000A

Impedance:
− 2milliohms

Accuracy:
− 1%

Resolution:
− 2.4mA

Sample Rate:
− 40kHz

Display Modes:
− peak or RMS

Specification (Voltmeter)

Input Voltage, Un:
− 0-600Vdc or 0-528Vac

Maximum Over Voltage Rating:
− 800V

Impedance:
− 1.5Mohms

Accuracy:
− 1%

Resolution:
− 10mV

Sample Rate:
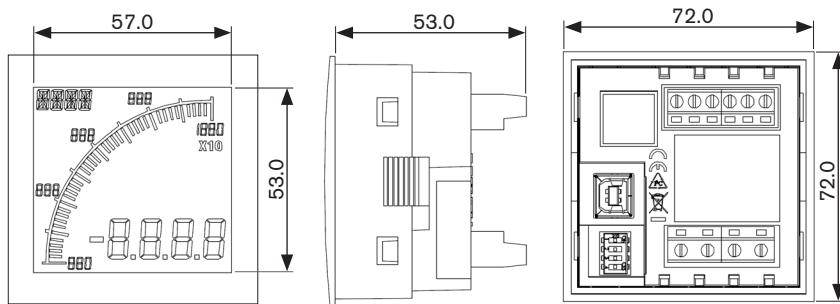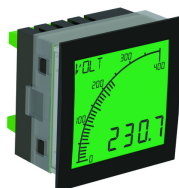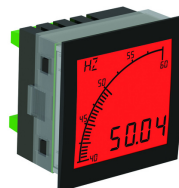− 40kHz

Display Modes:
− peak or RMS

Specification (Frequency Meter)

Input Frequency:
− 0-400Hz

Impedance:
− 1.5Mohms

Accuracy:
− 0.1%

Resolution:
− 0.1Hz

Sample Rate:
− 40kHz

Signal Level:
− 10-528Vac

Specification (DC Process Meter)

Input:
− 0 to +/-10Vdc or 0-50mA

Impedance:
− 10V input: 100kohms
− 50mA input: 15ohms

Accuracy:
− 10V input: 0.1%, 50mA input: 0.01%

Specification subject to change without notice.