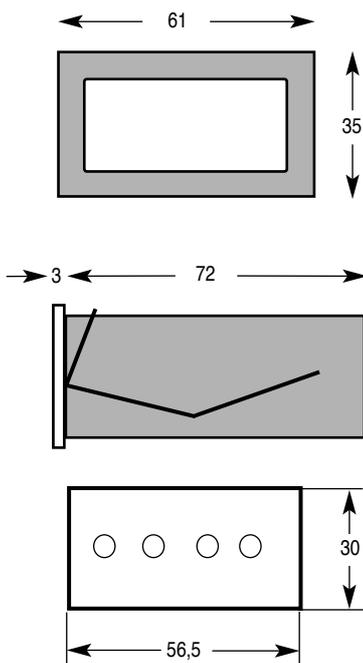


Digital Panel Meter DPM 540

Meas. Display:	4 Digit
Display:	red LED 12,5 mm
Zero Point:	automatic zero point correction
Polarity:	no
Meas. Rate:	2.5 Measurements per sec.
Decimal Point:	selectable setting
Device Housing:	ABS Plastic black
Overload Meas.:	10 times of meas. Voltage range, max 250V
Overload Meas.:	2 times of meas. Current range
Supply Voltage:	5 Volt DC, 170 mA
Common Mode:	CMRR better 80dB
Operating Temp.:	-10°C...+50°C
Protection Index:	IP 50 Front
	IP 00 Rear acc. DIN 40050
Connector Type:	Lift Clamps
Front Panel:	H x W = 35 x 61 mm
Panel cut-out:	H x W = 30,5 x 57 mm
Mounting Depth:	D = 73 mm

Mechanical Dimensions:**Protection**

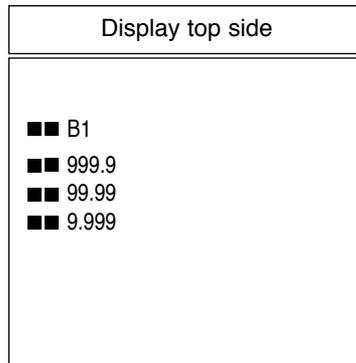
Contact safety device for the Rear Side to protect measurements voltages over 50 Volt AC/DC

Settings and Connections

The measuring range and the supply voltage are indicated on the device label. The devices are twice factory tested and calibrated. The decimal point is factory set to the range specified on the label. In case of changes proceed according to the sketch. For measurement adaptations the scale factor can be varied through Pot. P1 by about +/- 10% from the end of range. This is valid only for models DPM 540/ .. VDC/VAC/ADC/AAC not for converter models with Analog output.

Setting the Decimal Point

The decimal point is set through a soldering jumper on the top side of the PCB.

**Important installation hints**

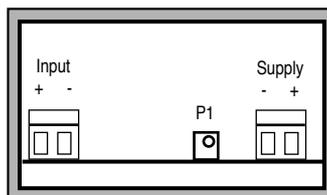
The measuring input and the supply are not galvanic separated. The maximum permitted voltage difference between In-Low and supply minus is -0.5V ... +2V. If the voltage difference exceeds the permitted value the device must be supplied through a separate power supply in order to create the galvanic separation. Operation of multiple devices from one power supply is possible under the condition that all In-Low potentials are connectable to supply minus and are connected. In case of current measurements the shunt must be connected into the minus line circuit.

DC-Voltage Type 540-001 ... 540-004

Meas. instrument with full +/- range from 0000 to 9999 digits. Accuracy class 0.1% +/- 1 digit from measuring value. Measuring input and supply connections see sketch.

DC-Current Type 540-020 ... 540-025

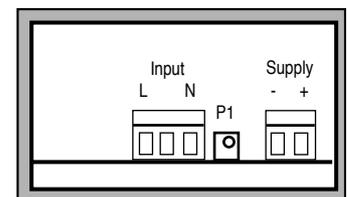
Meas. instrument with full +/- range from 0000 to 9999 digits. Accuracy class 0.2% +/- 1 digit from measuring value. Internal voltage drop max. 1000 mV. For current measurements a 1000 mV range shunt is used with the decimal point set accordingly. Example: Shunt 1A/1000 mV. The decimal point will be set to 999.9 mA. Measuring input and supply connections see sketch.

**AC-Voltage Type 540-011 ... 540-014**

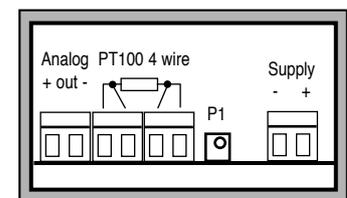
Meas. instrument with integrated rectifier for 'True RMS' measurements. Meas. display is in 'U rms' calibrated. Frequency range DC to 100Hz. Accuracy class 0.5% +/- 2 digits from measuring value. Measuring input and supply connections see sketch.

AC-Current Type 540-030 ... 540-033

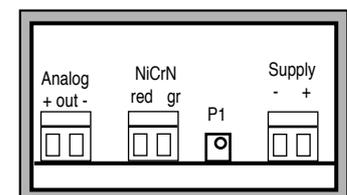
Meas. instrument with integrated rectifier for 'True RMS' measurements. Meas. display is in 'I rms' calibrated. Frequency range DC to 100Hz. Accuracy class 0.5% +/- 2 digits from measuring value. For current measurements a 1000 mV range shunt is used with the decimal point set accordingly. Example: Shunt 1A/1000 mV. The decimal point will be set to 999.9 mA. Measuring input and supply connections see sketch.

**PT100 Temperature 4-wire****Type 540-050**

Range of type 540/PT100/B1: -0.0°C ... +750.0°C, resolution 0.1 Kelvin. With this model a line resistance of up to 10 Ohm is compensated automatically. Inclusive Analog output with 1mV/°C. Measuring current PT 100 maximum 1.5mA. Accuracy class: +/- 0.1% +/- 1 digit of the meas. value. Measuring input and supply connections see sketch.

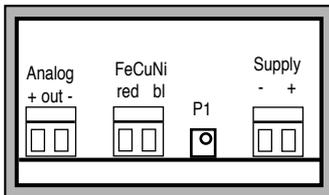
**NiCrNi Temperature****Type 540-060**

Range of type 540/NiCrNi/B1: -0.0°C ... +999.9°C, resolution 0.1 Kelvin. This model is calibrated with a sensor comprising DIN 43710 standard. Inclusive Analog output with 1mV/°C. Accuracy class B1: +/- 1% +/- 4 digits from meas. value. Measuring input and supply connections see sketch.



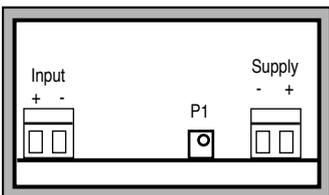
FeCuNi Temperature Type 540-070

Range of type 540/NiCrNi/B1: $-0.0^{\circ}\text{C} \dots +600.0^{\circ}\text{C}$, resolution 0.1 Kelvin. This model is calibrated with an internal temperature com-pensated sensor comprising DIN 43710 standard. Inclusive Analog output with $1\text{mV}/^{\circ}\text{C}$. Accuracy class: $\pm 1.5\%$ ± 4 digits from meas. value. Measuring input and supply connections see sketch.



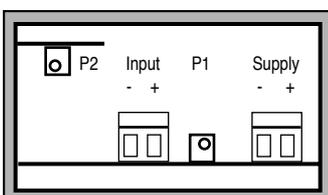
Special Measuring Ranges Type 540-008 and 540-027

The models 540-008 and 540-027 provide for standard voltage- and current-signals displays for different values. Maximum display ranges is 9999. The ranges are set at factory site according to customer order and are indicated on the device label. Type 540-008/0-10V provides a display range from 0 to customer value. Type 540-027/0-20mA provides a display range from 0 to customer value. Accuracy class 0.1% ± 1 digit from meas. value. Measuring input and supply connections see sketch.



Special Measuring Ranges Type 540-009 and 540-028 / -029

These models provide for standard voltage- and current-signals displays for different values. The display ranges are set at factory site according to customer order and are indicated on the device label. Type 540-009/0-10V provides a display range from + to - customer value. Type 540-028/0-20mA provides a display range from + to - customer value. Type 540-029/4-20mA provides a display range from + to - customer value. Accuracy class 0.1% ± 1 digit from meas. value. With Pot. P1 the end point and with Pot. P2 the zero point can be scaled.



Option Run-Hold Type 540-150

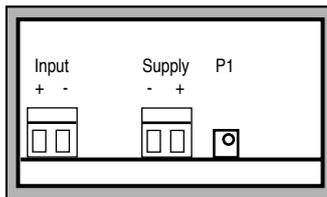
By activating Input Run-Hold the measuring device runs its measuring cycle up to the end and holds the displayed value as long as Run-Hold is active.

Option: DC/DC-Converter

With this option a galvanic separation between supply voltage and measuring voltage is established.

Converter Input voltage range

12V/5V	9 - 18V DC
24V/5V	18 - 36V DC



Safety Precautions

Employing these instruments, regulations for working with high voltage equipment, as well as any Professional Trade Association regulation for working with electrical appliances and installations have to be observed.

CE-Guidelines

Meets the EMV Guideline (89/336/EWG) and the German EMV ruling by applying the Basic Standard EN 50081/ EN 50082. Meets the Low Voltage Guideline (73/23/EWG) by applying Product Standard EN 61010.

Guarantee Regulations

Regulations by law apply for guarantee within 6 month. All equipment is factory tested and calibrated. Excluded from the guarantee are normal wear and tear, defects due to misuse, negligence, chemical exposure, mechanical stress as well as equipment, which has been modified, re-labeled or otherwise altered or if attempts to repair have been made. All guarantee claims are subject to our scrutiny and approval.

Service

We are glad that you decided on an instrument from our product range. If there are what so ever any defects, please send the instrument (postage paid) to your distributor. For technical information contact us via E Mail: info@schwille.de
Technical changes reserved.