

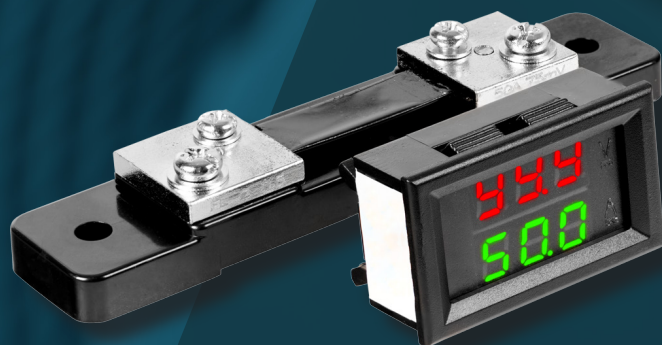
PANEL-MOUNT VOLT/AMMETER

COMPACT DC VOLTAGE AND CURRENT METER UP TO 100 V / 50.0 A

JOY-IT

SPECIAL FEATURES

- ✓ Measures 0–100 V DC and 0–50.0 A DC simultaneously
- ✓ External shunt resistor for accurate high-current measurement
- ✓ Integrated calibration potentiometer for fine adjustment
- ✓ Dual 3-digit LED displays – red (voltage), green (current)
- ✓ Compact panel design with only 48 × 29 × 22 mm
- ✓ Wide supply range (3.5–30 V DC) and fast 500 ms refresh rate



The COM-VAM02 is a compact and precise digital DC volt/ammeter designed for accurate monitoring of voltage and current in low-voltage systems. With its integrated dual display, external shunt resistor, and calibration function, it offers a dependable and user-friendly solution for laboratories, industrial setups, and mobile applications.

The device operates from 3.5 – 30 V DC and measures voltages up to 100 V DC and currents up to 50 A DC with a fine resolution of 0.1 V / 0.1 A. Two separate 3-digit LED displays clearly present both measured values — the red display for voltage and the green display for current. Each display features a digit height of 0.28", ensuring excellent visibility even in bright environments.

By using an external precision shunt resistor, the COM-VAM02 achieves safe and stable high-current measurements without excessive internal heating or voltage drop. The integrated calibration potentiometer allows the current reading to be fine-tuned, ensuring long-term accuracy even after extended use.

With a refresh rate of 500 ms and an accuracy of $\pm 1\% + 2$ digits, the device delivers fast, stable, and reliable readings. Thanks to its compact size (48 × 29 × 22 mm) and wide operating temperature range (–10 °C to +60 °C), it can be easily installed in control panels, test benches, or portable systems.

The COM-VAM02 is the ideal solution for anyone needing a precise, robust, and affordable dual measurement instrument for DC voltage and current — combining ease of installation with dependable performance in everyday use.

TECHNICAL SPECIFICATIONS

Operating voltage	3.5 - 30 V DC
Voltage measuring range	0 - 100 V DC
Voltage resolution	0.1 V
Voltage measuring accuracy	$\pm 1\% + 2$ digits
Current measuring range	0 - 50.0 A DC
Current resolution	0.1 A
Current measuring accuracy	$\pm 1\% + 2$ digits
Display size	0.28" per digit
Refresh rate	500 ms
Current measuring accuracy	$\pm 1\% + 2$ digits
Operating temperature	-10 to +60°C
Display mode	3-digit segment display / per measured value
Display colour	Red (voltage), green (current)
Cable length	14 cm
Special features	Integrated current calibration potentiometer, external shunt resistor with mounting plate

CABLE ASSIGNMENT

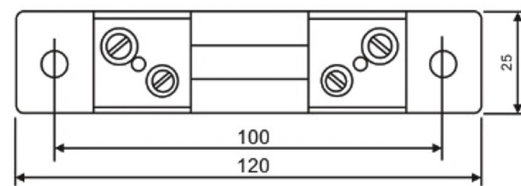
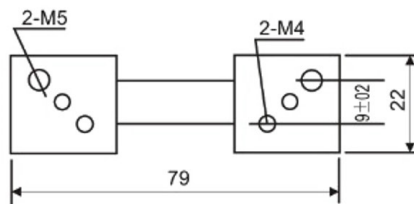
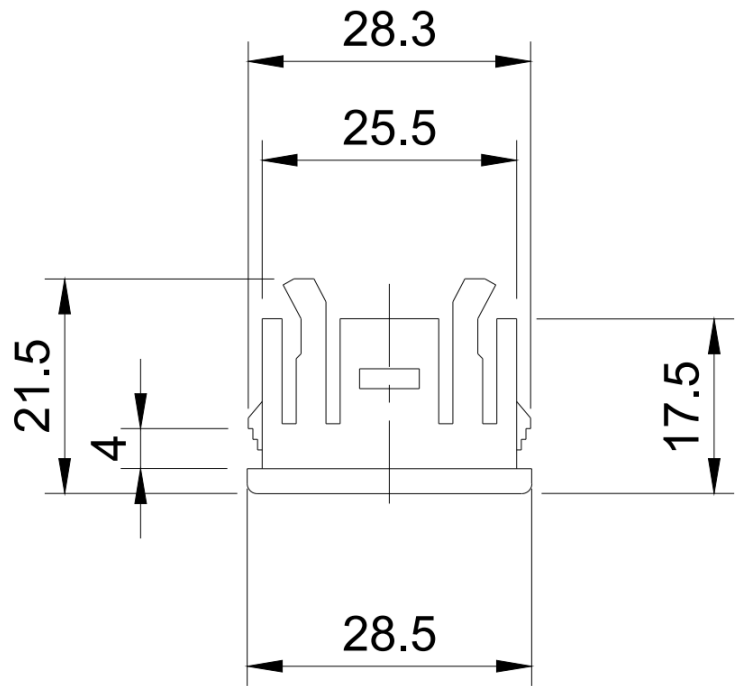
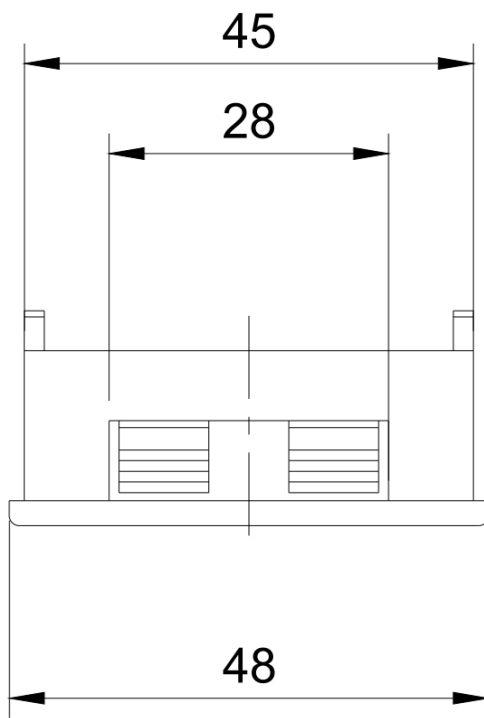
Thick red cable	Input current measurement
Thick black cable	Output current measurement
Thin red cable	Input supply voltage
Thin black cable	Ground supply voltage
Yellow cable	Voltage measurement
	Ground current measurement & Ground supply voltage are internally connected

ADDITIONAL INFORMATION

Weight	146 g
Dimensions	48 x 29 x 22 mm 120 x 25 x 19 mm (shunt resistor)
Article no.	COM-VAM02
Items shipped	1x Panel mount volt/ammeter, 1x shunt resistor, connection cables
Customs tariff number	90303370
EAN	4250236830940

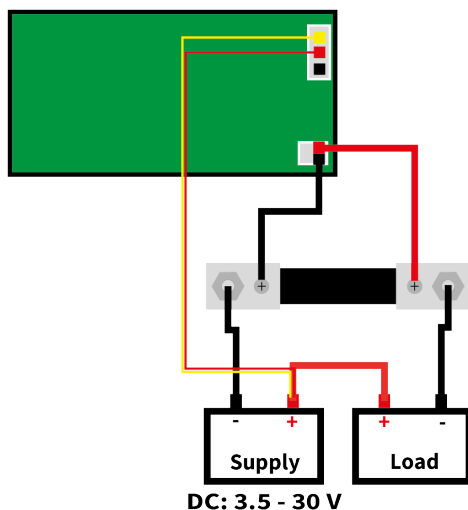


TECHNICAL DRAWING

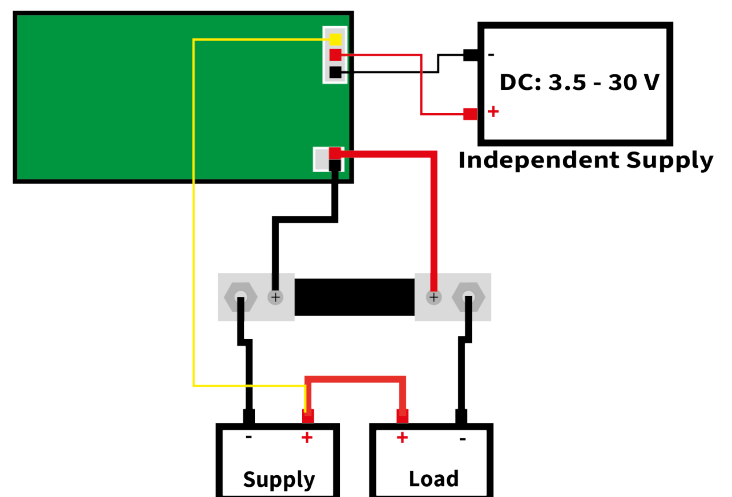


CONNECTION EXAMPLE

Operation via measuring voltage:



Operation with separate power supply:



When operating via the measuring voltage, the thin black cable remains unconnected.