VM-3P5A / VM-3P75CT

Three-phase energy meters

www.victronenergy.com



VM-3P5A



VM-3P75CT

Accessories included:



VE.Can RJ45 Terminators (both models)



Snap-on current transformers (VM-3P75CT only)



Three-phase energy meters with Ethernet and VE.Can communication ports

The Victron VM-3P5A and VM-3P75CT are standard devices to measure the power and energy of single-, split- and three-phase applications, for example at the distribution box or to measure the output of a PV Inverter, AC Genset or the output of an inverter and inverter/charger. The VM-3P5A is self-powered from all phases (N-L1-L2-L3), while the VM-3P75CT is self-powered via L1-N.

High refresh rate

Calculating the RMS power values for each phase, both energy meters transmit them at a high rate over VE.Can or Ethernet, leading to more accurate measurements for power usage, grid-import and grid feed-in, for example in an ESS system.

Setup is a breeze

Engineered for easy integration, both energy meters work out of the box (Plug & Play) as a grid meter for most systems. Configuration (via VictronConnect) is only required for changing the role (Grid Meter, PV Inverter, AC Genset or AC Load Meter), manual IP configuration instead of the default DHCP, and for VM-3P5A, setting the current transformer primary rating.

Remote monitoring from anywhere

Data from both meters is displayed in the VictronConnect App, a GX device such as the Cerbo GX or Ekrano GX, and our VRM Portal.

Industry-standard or snap-on type current transformers

VM-3P5A supports industry-standard 5 A current transformers (not included), ensuring accurate and consistent current measurement across single-, split- and three-phase installations. VM-3P75CT uses integrated snap-on type current transformers (included), sensing the current accurately without having to modify the wiring of an existing installation.

Configurable energy registration method

Both energy meters offer a configurable energy registration method, allowing selection between vector, arithmetic or absolute registration. This flexibility makes them suitable for various regional requirements.

Comprehensive electrical parameter monitoring

Reporting of line-to-neutral voltage, line-to-line voltage, power factor (according to IEEE convention), phase sequence for 3-phase configuration, phase rotation warning for 3-phase configuration, and protective earth voltages as well as neutral and line currents.

LED pulse output

The status LED can be configured as an energy pulse signal to enable visual diagnostics at a glance.

Model	VM-3P5A	VM-3P75CT
VOLTAGE INPUTS		
Voltage connection	Direct	
Input voltage range L-N	85 to 265 VAC	
Input voltage range L-L	150 to 460 VAC	
Frequency	50/60 Hz	
CURRENT INPUTS		
Current connection	Via current transformers (not included)	Via current transformers (included, wire length 640 mm) Bore diameter: 10 ±0.5mm
Rated current	5 A	75 A
COMMUNICATION		
VE.Can communication port	Two RJ45 connectors (VE.Can terminators included)	
Ethernet communication port	One RJ45 connector	
Modbus UDP	Support via Ethernet communication port, see Appendix in the manual for details incl. registers	
Refresh rate	100 ms	
POWER SUPPLY		
Type	Self-powered supply via N-L1-L2-L3	Self-powered supply via L1-N
Consumption	1,85 W / 3,5 VA	1,45 W / 3,1 VA
Frequency	50/60 Hz	
ENCLOSURE		
Material & Colour	Polycarbonate, blue (RAL 5012)	
Voltage connection	Screw terminals 1,0 to 2,5 mm² (22 to 12 AWG)	
Current transformer connection	Pluggable screw terminals (included)	
Protection category	IP20	
Weight	260 g	370 g (including packaging)
Dimensions (h x w x d)	90 x 71 x 59 mm (3.5 x 2.8 x 2.3 in)	
ENVIRONMENTAL		
Indoor/outdoor usage	Indoor only	
Operating temperature	From -10 to +55 °C	
Storage temperature	From -20 to +70 °C	
Relative humidity	< 90 % non-condensing	
Altitude	2000 m (6562 ft)	
Mains supply voltage fluctuations	±0,1 Vin	
Overvoltage category	Cat. III	
Pollution degree	2	
STANDARDS		
Safety	EN-IEC 61010-1	

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