

Energy meter for direct current

with HTTP, TCP/IP, Modbus-TCP protocoll for indirect current measurement via shunt resistors voltage ranges 0 - 1500 VDC

Type: **EZG-TCP**



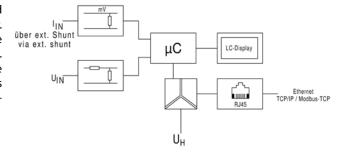
Application

The electronic direct current meter EZG-TCP is used for measuring the active power for incoming and outgoing currents in direct current installations. It is applied in photovoltaic installations, battery systems, charging stations, direct current machines etc. Measurement can be made in installations with pulsed direct current controls (PWM controls). The energy meter is connected to a shunt. All measuring values for current, voltage and energy are indicated in a display. The energy values are stored and provided on an Ethernet interface for further processing.



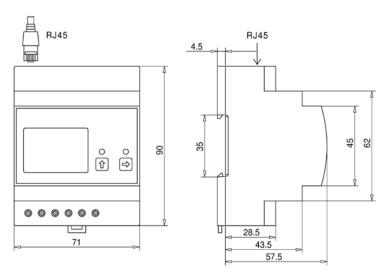
Function

The parameters to be measured are supplied to an integrated module via an internal shunt as well as via a voltage divider. There, the instantaneous values of current and voltage are multiplied and converted into active power and active energy. A microcontroller accepts the assessments, the output of the pulses as well as the storage of the measured values. The results are displayed on LC display. An auxiliary supply voltage is required. The meter readings are stored in case of power failure.





Dimensions





Types and variants

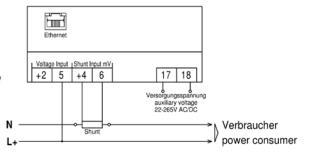
EZG-TCP

Connection

Gleichstrom mit Shunt in Plusleitung DC current with shunt in plus line

Ethernet Voltage Input | Shunt Input mV | +2 | 5 | +4 | 6 | 17 | 18 | Versorgungsspannung auxiliary voltage 22-265V AC/DC N L+ Verbraucher power consumer

Gleichstrom mit Shunt in Minusleitung DC current with Shunt in minus line





Technical data

Input	Accuracy	± 1% class B acc. DIN EN 50470-3
	Rated voltages	0-10 VDC, 0-25 VDC, 0-50 VDC, 0-100 VDC, 0-500 VDC, 0-1000 VDC
		0-1500 VDC or by choice (please specify by ordering), Ri $\geq 2~\text{M}\Omega$
	Rated current external	measuring via external shunt 1-20.000 A/ 60 mV, 100 mV or
		150 mV, selectable via button on front panel
	Pulsed direct current (PWM)	20 Hz - 30 kHz
	Overload permanent	current and voltage 1,2-fold
	High surge load	voltage 2-fold 1 s, max. 2000 V, current 20-fold 0,5 s
Indicators	Display	LCD display
		active energy import 9 999 999,99 kWh/MWh (with return stop)
		active energy export 9 999 999,99 kWh/MWh (with return stop)
		ampere hours import 9 999 999,99 kAh (with return stop)
		ampere hours export 9 999 999,99 kAh (with return stop)
		instantaneous active power +9 999 999,99 kW with (-) in case of
		power, voltage, current
	Function indicators	LED for active energy import and export (pulses/kWh
		depending on set shunt)
	Interface	10 Mbits/s Ethernet LAN interface
	Update display	1 x per second
	Update register	1 x per second
Auxiliary voltage	Standard	21-265 VAC+DC, 2 VA, (EMC DIN EN 61326 class A)