

VE-EM2121-DT

Multi-function Single-phase
electric meter



1. Direct Connection Max 100A without relay / 80A with relay
2. Standard 2-modules width, TH35-7.5 type rail installation with Touch key design.
3. Multi-Fnction parameter measurement for Voltage, Current, Active, Reactive, Apparent Power and Power Factor.
4. Bi-Directional energy measuring with monthly electricity consumption stats for 12 month and daily consumption for 31 days.
5. Built-In relay, support remote control and prepaid management control.

Electrical Characteristics

Rate voltage (Un)	110V or 230V AC
Operational voltage	85 – 275V AC
Overload capacity of voltage	2*Un for 1 second
Rate current(Ib)	80A
Operational current	0.1%Ib – I _{max}
Overload capacity of current	30*I _{max} for 0.01 second
Operational frequency range	45 – 65Hz
Power consumption	<2W/10VA
Pulse constant	1000imp/kWh
Display	LCD with backlight
Maximum reading of energy	999999.99 kWh/kVarh
Measure type	Single phase two wire

Measurement accuracy

Voltage, Current	±0.5%
Active power	±1.0% / 0.5%
Reactive power	≤1%
Apparent power	±1.0%
Active energy	±1.0% / 0.5%
Reactive energy	±2.0%
Power factor	±1.0%
Frequency	±0.2%

Environmental Characteristics

Operating Temperature	-25 – +55°C
Storage Temperature	-40 – +80°C
Humidity	5%–95%, non-condensing
Pollution Degree	2
Altitude	Up to 2000m
Vibration	10 Hz to 150Hz, IEC 60068-2-6
IP Degree of Protection	Designed to IP51 front display, IP30 meter body

Electromagnetic Characteristics

Electrostatic Discharge	±8kV(contact discharge),±15kV(air discharge)
Immunity to Radiated Fields	10V/m, 80 – 2000MHz
Immunity to Electrical Fast Transients	±4kV
Immunity to Surges	±4kV
Immunity to Conducted Disturbances	10V, 0.15 – 80MHz
Immunity to Magnetic Fields	IEC 61000-4-8
Immunity to Voltage Dips	IEC 61000-4-11
Radiated Emissions	Class B, according EN55011
Conducted Emissions	Class B, according EN55011

Safety

Overvoltage Category	CAT III, according IEC 61010-1
Measurement Category	CAT III, according IEC 61010-1
Insulation	AC Voltage Test: 4kV for 1 minute
	Impulse Voltage Test: 6kV – 1.2/50µs waveform
Protective Class	II, according IEC61010-1

Product size chart

