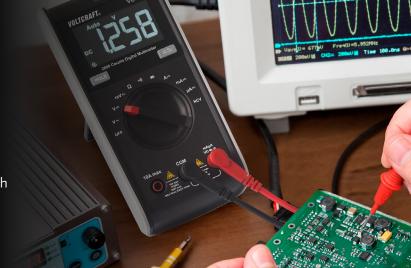
# **VOLTCRAFT**

# ALL OUR LATEST PRODUCT HIGHLIGHTS



The brand-new VC-100 compact multimeter series stands for high quality and provides great value for money. A new design and an easily readable display make these testers suitable for all CAT III 600 measurement tasks. All four VC-100 multimeter types come with a built-in torch and enable non-contact voltage (NCV) testing.



### **VOLTCRAFT VC-191 Digital Multimeter**





Watch product video



#### **VOLTCRAFT VC-100 Series: A Comparison**









#### 100 series: basic features

Туре	VC-131	VC-151	VC-171	VC-191
Standard test functions	V	✓	✓	V
Display (Counts)	2000	4000	4000	6000
Auto ranging	✓	✓	✓	V
AC-current measurement	-	✓	✓	✓
DC-current measurement	✓	✓	✓	✓
True RMS	-	✓	✓	✓
Low Z mode	-	-	-	✓
Capacitance measurement	-	-	✓	✓
Frequency readings	-	-	✓	✓
Duty cycle	-	-	✓	✓
Diode testing	✓	-	✓	✓
Continuity testing	✓	✓	✓	✓
Delta measurement	-	-	✓	✓
Low-pass filter	-	-	-	✓
Temperature readings	-	✓	-	✓
Battery testing	-	✓	-	-
Data-Hold function	✓	✓	✓	✓
Min/Max display	-	-	-	✓
Test leads with wear-and-tear indicator	✓	✓	✓	V
Backlighting	<b>√</b>	✓	✓	✓
Built-in torch	✓	✓	✓	✓
Non-contact voltage (NCV) testing	<b>√</b>	✓	✓	V
Low-battery indicator	✓	✓	✓	✓
Auto-OFF	✓	✓	✓	V

#### 100 series: measurement functions

Туре	VC-131	VC-151	VC-171	VC-191
DC voltage	600V	600V	600V	600V
AC voltage	600V	600V	600V	600V
AC/DC current	-/10A	10A/10A	10A/10A	10A/10A
Resistance	20ΜΩ	20 ΜΩ	40ΜΩ	60ΜΩ
Capacitance	-	-	100uF	60mF
Frequency	-	-	10 MHz	1 MHz
Temperature	-	-40 ~ 400°C	-	-40 ~ 400°C
Duty cycle	-	-	0.1% ~ 99.9%	0.1% ~ 99.9%
LoZ AC voltage	-	-	-	600V
Product #	2446476-MA	2446477-MA	2446478-MA	2446475-MA

A new safety category aimed at schools, colleges and universities. Comes with a safety housing specially designed for vocational training across the electrical trades: The battery compartment stays locked as long as the test leads are connected to the device. This enables a safe change of batteries during apprenticeship and work life. Probe ports auto-lock when you open the battery compartment. The large EBTN display features a probe port navigator that uses audiovisual signals to help select the appropriate ports.



### **VOLTCRAFT VC-292 Digital Multimeter**





#### Watch product video



#### **VOLTCRAFT VC-200 Series: A Comparison**









#### 200 series: basic features

Туре	VC-232	VC-252	VC-272	VC-292
Measurement category	CAT III 600V	CAT III 600V	CAT III 600V	CAT III 600V
Display (Counts)	2000	4000	6000	6000
True RMS	✓	V	✓	✓
LoZ	✓	V	✓	✓
Temperature	-	-	✓	-
Frequency	-	V	✓	✓
Capacitance	-	V	✓	✓
Duty Cycle	-	-	✓	✓
incl. current clamp adapter	-	-	-	✓
Battery checker 1,5V/9V	✓	V	-	-
Diode testing	✓	✓	✓	✓
Continuity testing	✓	V	✓	✓
Non-contact voltage (NCV) testing	✓	✓	✓	✓
EBTN display	✓	✓	✓	✓
Display backlighting	✓	✓	✓	✓
Wrong probe port notification	✓	✓	✓	✓
Fuse auto-reset (600mA only)	✓	✓	✓	✓
Safety housing (battery change)	✓	✓	✓	✓
Data-Hold function	✓	✓	✓	✓
Relative mode	✓	✓	✓	✓
Low battery indicator	V	✓	✓	✓
Auto-OFF	✓	✓	✓	✓
Built-in torch	✓	<b>√</b>	V	✓

#### 200 series: measurement functions

Туре	VC-232	VC-252	VC-272	VC-292
DC voltage	600V	600V	600V	600V
AC voltage	600V	600V	600V	600V
AC/DC current	10A/10A	10A/10A	10A/10A	60A/60A
Resistance	20.00ΜΩ	40.00ΜΩ	60.00ΜΩ	60.00ΜΩ
Capacitance	-	40.00mF	60.00mF	60.00mF
Frequency	-	10.00Hz ~ 10.00MHz	10.00Hz ~ 10.00MHz	10.00Hz ~ 10.00MHz
Temperature	-	-	-40 ~ 1000°C	-
Duty cycle	-	-	0.1% ~ 99.9%	0.1% ~ 99.9%
LoZ AC voltage	2V ~ 600V	4V ~ 600V	6V ~ 600V	6V ~ 600V
Product #	2576860-MA	2576861-MA	2576862-MA	2576863-MA

A new benchmark product line aimed at laboratories and R&D facilities, providing outstanding accuracy and 60,000 count TFT displays that are readable from all angles. The devices let you adjust auto-OFF, backlighting, acoustic signals and other settings individually to meet user needs. Built-in neodymium magnets allow attaching the equipment to switchboard cabinet doors and keep the probe tips nice and tidy on the meter. The top-end products come with Bluetooth smartphone and tablet connectivity to enable remote operation and datalogger functions.



### **VOLTCRAFT VC-891 Digital Multimeter**





Watch product video



#### **VOLTCRAFT VC-800 Series: A Comparison**









#### 800 series: basic features

Туре	VC-831	VC-851	VC-871	VC-891
Counts	6000	6000	60000	60000
True RMS	<i>y</i>	√	, /	, /
Auto/manual ranging	•/•	•/•	•/•	•/•
Basic accuracy DC	± 0,5% +5	± 0,5% +5	± 0,08% +5	± 0,03% +5
CAT III	1000V	1000V	1000V	1000V
CAT IV	600V	600V	600V	600V
Dual Display	_	_	✓	<b>√</b>
Peak (1ms)	_	_	✓	V
Low-pass filter (1kHz)	_	_	_	<b>V</b>
Temperature readings	_	✓	✓	V
Data logging via app	_	_	✓	V
Screen displayed in the app	_	_	✓	✓
Low impedance	✓	✓	✓	✓
AC+DC reading function	_	_	_	V
Continuity testing	✓	✓	✓	✓
Selectable threshold (continuity)	_	_	✓	✓
Diode testing	✓	✓	✓	✓
Backlighting	✓	✓	✓	✓
Bar graph display	✓	✓	✓	✓
Data-hold function	✓	✓	✓	✓
Maximum-hold function	✓	✓	✓	✓
Minimum-hold function	✓	✓	✓	✓
Relative mode	✓	✓	✓	✓
Wrong probe port notification	✓	✓	✓	✓
Compare function	_	_	✓	✓
Power testing using wattage	_	_	✓	_
Auto-OFF	✓	✓	✓	✓
Battery level indicator	✓	✓	✓	✓
Time and date display	_	_	✓	V
Mutable button sounds	✓	✓	✓	V

#### 800 series: measurement functions

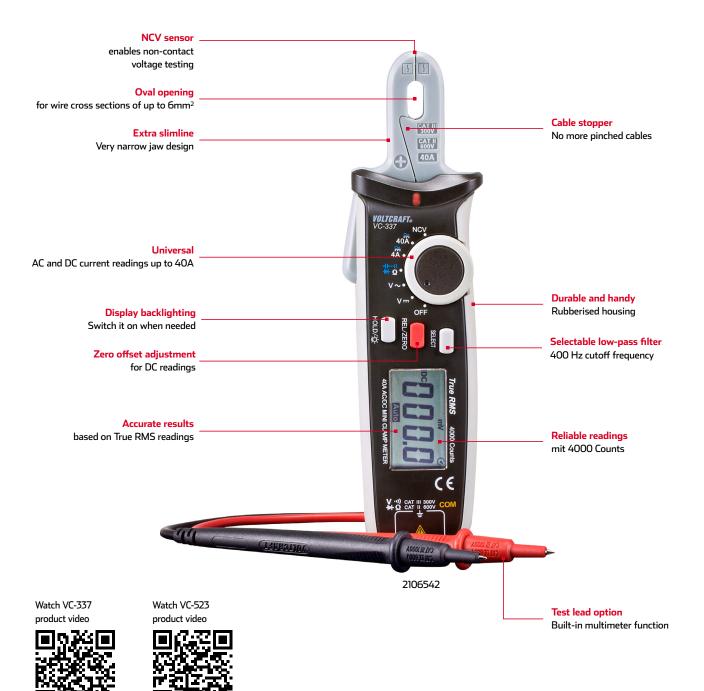
Туре	VC-831	VC-851	VC-871	VC-891
DC voltage	1000V	1000V	1000V	1000V
AC voltage	750V	1000V	1000V	1000V
AC/DC current	10A/10A	10A/10A	10A/10A	10A/10A
AC frequency range	45 - 400Hz	45 - 1000Hz	45 - 1000Hz	45 - 10000Hz
Resistance	60 ΜΩ	60 ΜΩ	60 ΜΩ	60 ΜΩ
Capacitance	60 mF	60 mF	60 mF	60 mF
Frequency	10 MHz	10 MHz	60 MHz	60 MHz
Temperature	_	-40 ~ 1000°C	-40 ~ 1000°C	-40 ~ 1000°C
LoZ AC voltage	600V AC	600V AC	600V AC	600V AC
LoZ frequency range	45 - 400Hz	45 - 1000Hz	45 - 1000Hz	45 - 1000Hz
Product #	2576864-MA	2576865-MA	2576867-MA	2576866-MA

#### Full product details are available at conrad.com.

When confined space prevents the use of large-size current clamps, VOLTCRAFT VC-300 clamp meters come in handy. For instance, the VC-337 features a miniature probe tip which makes taking readings when testing terminal strips and circuit breakers easy.

VC-500 series testers are generally suitable for all common measurement tasks. Features such as OLED and the latest state-of-the-art high end negative display mean excellent screen readability in any light condition is guaranteed.

#### **VOLTCRAFT VC-337 CLAMP METER**



### **VOLTCRAFT VC-300 Series:** A Comparison











#### 300 series: basic features

Туре	VC-310	VC-320	VC-330	VC-335	VC-337
Current reading range	200 A	200 A	100 A	200 A	40 A
AC/DC current	AC	AC	AC/DC	AC/DC	AC/DC
Voltage	-	-	✓	✓	✓
Non-contact voltage (NCV) testing	-	✓	✓	✓	✓
Temperature	-	-	-	✓	-
Resistance	-	-	✓	✓	✓
Capacitance	-	-	✓	✓	✓
Measurement method	Average	Average	True RMS	True RMS	True RMS
Inrush current	-	-	-	-	-
Auto AC/DC detection	-	-	-	-	-
300 series: measurement function	IS				
	vc-310	VC-320	VC-330	VC-335	VC-337
Туре		VC-320	VC-330	VC-335	VC-337
Type Functions using the current clamp	VC-310				
Type Functions using the current clamp Alternating current		VC-320 200A	100A	200A	40A
Type Functions using the current clamp Alternating current Direct current	VC-310 200A -	200A -	100A 100A	200A 200A	40A 40A
Type Functions using the current clamp Alternating current Direct current	VC-310		100A	200A	40A
Type Functions using the current clamp Alternating current Direct current Inrush current	VC-310 200A -	200A -	100A 100A	200A 200A	40A 40A
Type  Functions using the current clamp  Alternating current  Direct current  Inrush current  Functions using test leads	VC-310 200A -	200A -	100A 100A	200A 200A	40A 40A
Type  Functions using the current clamp  Alternating current  Direct current  Inrush current  Functions using test leads  AC voltage	VC-310 200A -	200A -	100A 100A -	200A 200A -	40A 40A -
Type  Functions using the current clamp  Alternating current  Direct current  Inrush current  Functions using test leads  AC voltage  DC voltage	VC-310 200A -	200A -	100A 100A - 600V	200A 200A - 600V	40A 40A - 600V
Type  Functions using the current clamp  Alternating current  Direct current  Inrush current  Functions using test leads  AC voltage  DC voltage  Resistance	VC-310  200A	200A -	100A 100A - - 600V 600V 20 MΩ	200A 200A - 600V 600V 20 MΩ -40°C - 1000 °C	40A 40A - 600V 600V 40 MΩ -
Type  Functions using the current clamp Alternating current Direct current Inrush current Functions using test leads AC voltage DC voltage Resistance Temperature reading range Capacitance	VC-310  200A	200A -	100A 100A - 600V 600V	200A 200A - 600V 600V 20 MΩ	40A 40A - 600V 600V

1307543-MA

### **VOLTCRAFT VC-500 Series:** A Comparison

Product #

Product #



1307542-MA







1693354-MA

1307544-MA



1461483-MA

1419512-MA



2106542-MA

#### 500 series: basic features

lypel	VC-522	VC-523	VC-532	VC-533	VC-585	VC-590
Current reading range up to	400 A	400 A	1000 A	1000 A	400 A	600 A
Display (Counts)	4000	4000	6000	6000	4000	6000
Direct current	-	✓	-	✓	-	✓
Measurement method	True RMS	True RMS				
Display	LCD Negativ	LCD Negativ	LCD Negativ	LCD Negativ	LCD	OLED
500 series: measurement functi	ons					
Туре	VC-522	VC-523	VC-532	VC-533	VC-585	VC-590
Functions using the current clamp						
Current AC	400A	400A	1000A	1000A	400A	600A
Current DC	-	400A	-	1000A	-	600A
Functions using test leads						
AC voltage	600V	600V	600V	600V	600V	750V
DC voltage	600V	600V	600V	600V	600V	1000V
Resistance	40ΜΩ	40ΜΩ	60ΜΩ	60ΜΩ	10 MΩ	60 MΩ
Temperature reading range	-20°C - 760°C	-20°C - 760°C	-20°C - 760°C	-20°C - 760°C	-40°C - 1000°C	-40°C - 1000 °C
Capacitance	100µF	100µF	4000μF	4000μF	40mF	6mF
Frequency	10kHz	10kHz	10kHz	10kHz	1MHz	-

Full product details are available at conrad.com.

1693353-MA

1693352-MA

1693351-MA

1181861-MA

# ENERGY LOGGERS WITH WI-FI OR BLUETOOTH® INTERFACE

Reducing energy bills requires monitoring power usage. VOLTCRAFT supply a wide range of loggers that support communication via Bluetooth or Wi-Fi. Bluetooth-enabled products store usage data in a built-in memory while Wi-Fi loggers transfer readings to the cloud. The advantage of Wi-Fi meters is their long-term recording capacity. If you want to log the energy consumption of multiple devices, choose the SEM-8500 which comes with independent slots for six different appliances.



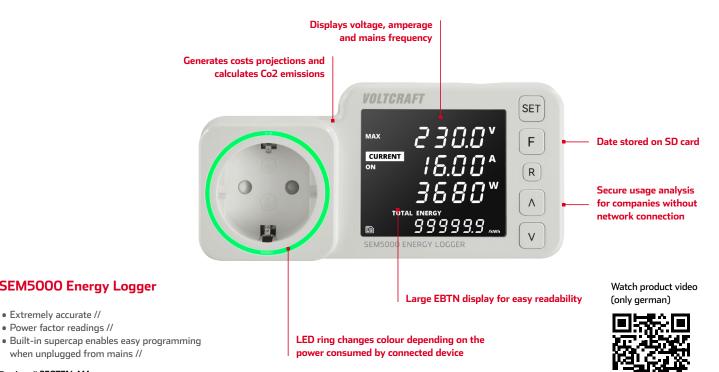


### Energy Loggers: A Comparison

Туре	SEM-6000 and SEM-6000 black	SEM-6500 WIFI	SEM-8500 WIFI
Interface	Bluetooth®	WiFi	WiFi
	Bluetootn	WIFI	WIFI
Data evaluation and programming via app	<b>√</b>	V	V
Built-in memory	V	-	-
Cloud-based storage	-	V	✓
Chart view of daily, weekly, monthly and	$\checkmark$	V	.1
Annual usage, data export option	V	V	V
Recording period 30 days max	V	_	_
Recording period 12 months max	-	V	✓
Accurate reading and display of energy consumption and power factor down to three decimal digits	✓	✓	✓
Timer and time planner via free iOS and Android app	✓	✓	✓
App-controlled socket	✓	V	✓
Active power reading range: 0.23 W - 3680 W	✓	✓	✓
Random mode to deter home intruders	$\checkmark$	✓	✓
LED ring changes colour depending on power reading	✓	✓	-
CO2 emission measurement function	✓	V	✓
Master-Slave function	<del>-</del>	_	✓
USB port 5V/DC 2.1A	_	-	✓
No. of sockets	1	1	6
Product #	1558906-MA (white) 2346499-MA (black)	1694192-MA	2359015 -MA

Both the SEM-4500 that comes with built-in memory (no data export option) and the SEM-5000 that stores readings on SD card are aimed at businesses that do not want to be loggers become a part of their IT infrastructure. Data are stored as CSV files on an SD card, to be transferred to a PC for processing. Keeping energy loggers off-line means no risk of malware compromising networks.





Product # 2587314-MA

• Extremely accurate // Power factor readings //

**Customer reviews:** 

4,1 out of 5 stars conrad.de · As of 10 Jan 2023

SEM5000 Energy Logger

when unplugged from mains //

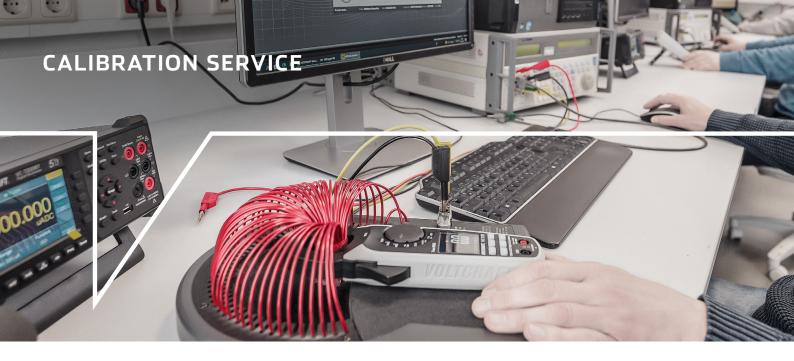
#### SEM4500 Energy Logger

- Backlight LCD //
- Power factor readings //
- Power surge alarm //
- Stores the 3 most recent readings internally //
- Displays voltage, amperage and mains frequency//
- Active power reading range from 0.3 to 3680 W //

Product # 1647179-MA



More energy loggers and additional information available at conrad.com



## ELECTRICAL EQUIPMENT CALIBRATION – ISO VS. ACCREDITED TESTING AND CERTIFICATION BODY

Opting for an accredited testing and certification body to calibrate equipment means choosing the highest calibration standards as these bodies are service providers approved by Deutsche Akkreditierungsstelle. Accreditation is based on a higher number of data points that are collected at much shorter intervals compared to ISO standards. This makes the issued certificate a reliable proof of the accuracy and precision of the tested device. Moreover, these certificates are globally recognised.

Calibration according to ISO standards requires lower sample rates, with the calibration being less stringent than calibrations carried out by accredited testing and certification bodies. Nevertheless, ISO standards are an excellent benchmark when it comes to certifying the accuracy of modern testing equipment.

#### What calibration to choose?

Whether to choose an expensive calibration provided by an **accredited testing body** over a **calibration according to ISO standards** depends on the way you operate your business: DIN EN ISO 9000/9001 standards require **traceable equipment calibration**. Company holding this type of certificate will have to calibrate every single piece of testing equipment they use. If this also involves globally recognised certificates, equipment will have to be calibrated by an accredited testing and certification body. Otherwise, a more **cost-effective ISO calibration** will suffice.

With regard to calibrating equipment designated as **reference for other testing equipment**, we recommend opting for an accredited certification body. Moreover, compliance with other standards, such as IAFT 16949, might also necessitate calibrations being carried out by an accredited testing and certification body.

#### A quick way of getting multimeters and clamp meters ISO-calibrated - no need to wait!

The delivery of brand-new ISO-compliant multimeters and clamp meters usually takes longer as the calibration of these devices is carried out by third-party testing bodies. This means having to wait 14 days or more until your purchase arrives isn't unheard of. However, Conrad offering **in-house equipment calibration** based at their Wernberg-Köblitz facilities that complies with **DIN EN ISO 9001:2015** standards speeds up this process significantly. Currently, this service comprises the calibration and certification of both handheld and bench multimeters as well as clamp meters using the latest methodologies.

How to find VOLTCRAFT calibrated products? Simply search: Voltcraft iso