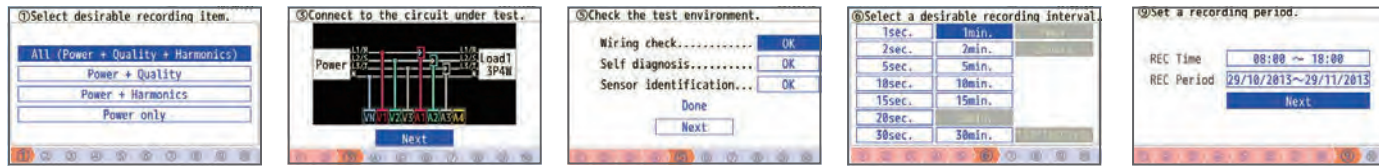


DM-5

Simultaneously measure power and power quality with user-friendly functions and guides

START/STOP Quick Start Guide

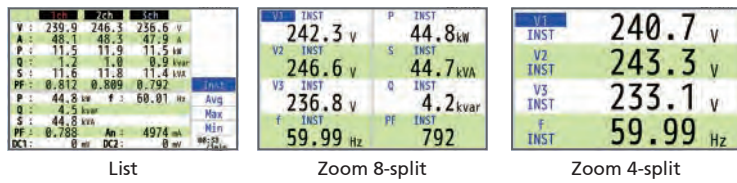
Select the parameters to test, follow the on screen guide for wiring configuration and be alerted if any incorrect settings are chosen before testing begins.



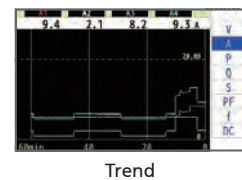
Function Select → Circuit Connection → Wiring Check → Set Intervals → Set Recording Time → Start Recording

W/Wh Power & Energy

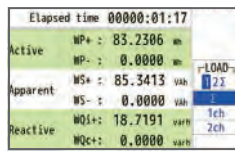
Instantaneous value



- Measures instantaneous / average / min / max for voltage, current, active / reactive / apparent power, PF (cosφ) and line frequency all on one screen.
- Recording time can be easily set from 1 second up to 2 hours.
- Trend and demand graphics are displayed on the large, full color screen for quick comparison.
- Define the size of capacitor banks for PF correction units.

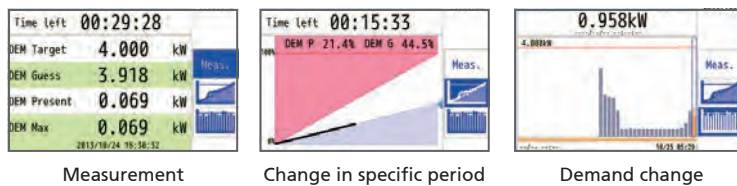


Integration value



- Display active / reactive / apparent energy in total and individually for each phase consumed (or generated in case of co-generation like solar panels, etc).
- The elapsed time is displayed on the same screen for quick analysis.

Demand



- Demand control, energy usage and estimated value are displayed graphically while max demand value and time are also recorded.

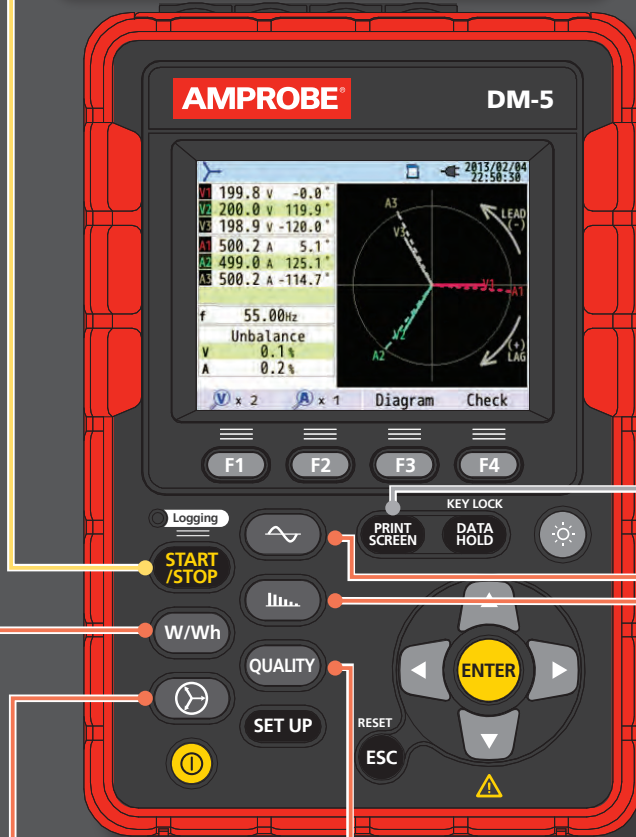
Vector and Wiring check



- Display voltage and current by vector per CH and unbalance ratio.
- Wiring check function confirms connection and displays ideal vector (at the lower left corner) according to the selected wiring system, and alerts the user of connection errors.

PRINT SCREEN Print Screen

- The Print Screen quick-button saves a BMP image of momentary readings for later comparison.



QUALITY Power Quality

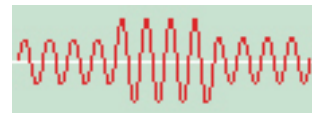
Event

All events	Occurrence
101.0 V	2013/07/10 10:45:45.136
50.4 V	2013/07/10 10:45:45.136
87.1 V	2013/07/10 10:45:55.136
128.5 V	2013/07/10 10:45:27.136
-217.1 V	2013/07/10 10:45:27.136
50.4 V	2013/07/10 10:45:10.136
87.1 V	2013/07/10 10:45:10.136
128.5 V	2013/07/10 10:45:02.136

Measures voltage swells / dips / interruptions / transients and inrush currents that may indicate a weak power distribution system. Such phenomena may damage or reset attached equipment. The DM-5 can catch swells / dips / interruptions and inrush currents based on half cycle (10 ms @ 50Hz or 8.3ms @ 60Hz) TRMS. All necessary data is displayed by pressing just one key.

Swell

Swell is an instantaneous voltage increase, most of the time originating from upstream power line failure or switching OFF large loads or switching ON large capacitors.

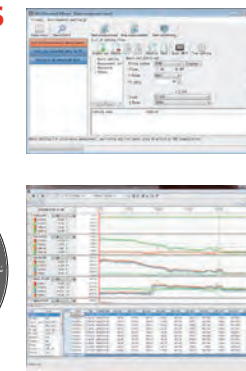
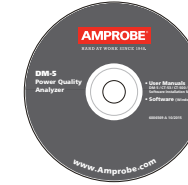


Windows software for data analysis and saving settings between tests

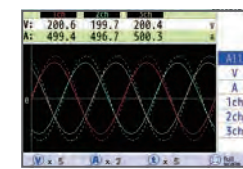
- Automatic creation of graphs and tables from recorded data.
- Uniform management of settings and recorded data acquired from multiple devices.
- Data can be expressed in crude oil and CO₂ equivalent values in the report.

System requirements

- OS: Windows® 8/7/Vista
 - Display: XGA(Resolution 1024x768 dots) or more
 - Hard-disk: 1 GB or more available space required
 - Other: With CD-ROM drive and USB port, NET Framework (3.5 or more)
- Windows® is registered trademark of Microsoft in the United States.

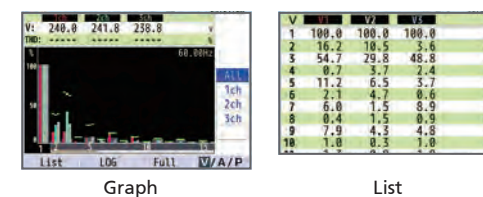


Waveform



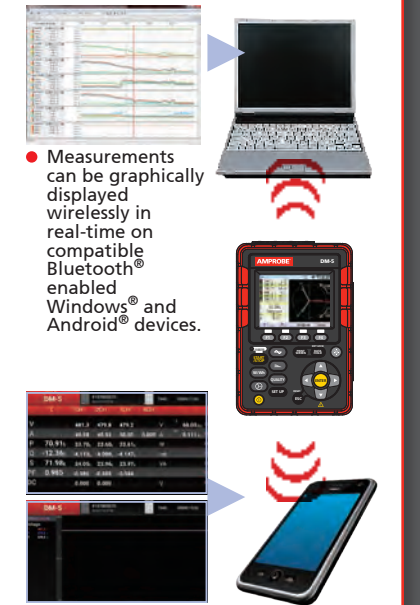
- Displays voltage and current on each Ch by waveform.
- Graphical scales can be adjusted or automatically set for both voltage/current axis and time axis.

Harmonics Analysis



- Graphic display of harmonic components up to the 50th order for voltage, current and power in total and for each phase.
- List display of harmonic content, rms value and phase angle of each order.
- Analyze harmonic currents that may contribute to damaged capacitor banks for PF correction, overheating transformers / neutral conductors / cables, and unwanted breaker tripping.

Real time and Remote measurements



- Measurements can be graphically displayed wirelessly in real-time on compatible Bluetooth® enabled Windows® and Android® devices.

- Bluetooth® is a registered trademark of the Bluetooth SIG, Inc.

USB Terminal

SD card Interface

- SD cards up to 2GB can be used
- Possible recording time when a 2 GB SD card is used:

Interval	REC item		
	Power	+Harmonics	
1sec	13 days	3 days	
1min	1-year or more	3 months	
30min	10-years or more	7-years or more	

Estimated recording time does not account for measurements related to power quality events. The max possible recording time will be shortened when recording such events.

Dip

Dip, as the opposite of a swell, is an instantaneous voltage decrease, most of the time caused by switching ON large loads or from downstream power line failure.

Interruption

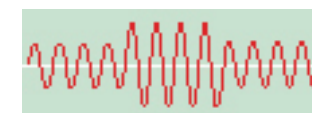
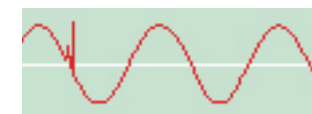
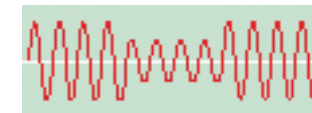
Interruption is a power line cut-off from any supply source. It may be caused by a fault in a power line, causing a switch gear to open.

Transients/Over Voltage (Impulse)

Transient is a very fast and momentary voltage increase that can seriously damage devices connected to a power line. It may be caused by electrical switching events such as instable contacts of relays, tripping of breakers, or even by lightning. The DM-5 can catch transients from 2.4 μs.

Inrush Current

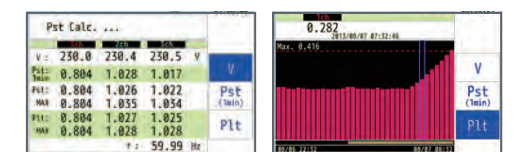
Inrush current is a surge current that happens when motors, or large- or low-impedance loads are switched ON. The current stabilizes as soon as the load has reached normal working conditions.



Flicker

Designed to meet IEC61000-4-15

Flicker is a phenomenon induced by periodic voltage changes due to fluctuating loads when using equipment such as an arc furnace, spot welder, crane, or excavator.



- Displays Pst (1min) on a trend graph.