



DEWETRON

Power analyzers

0.03% measurement error

10MS /S/Channel

16-phase Power Analysis

DEWE2-PA7

DEWE3-PA8

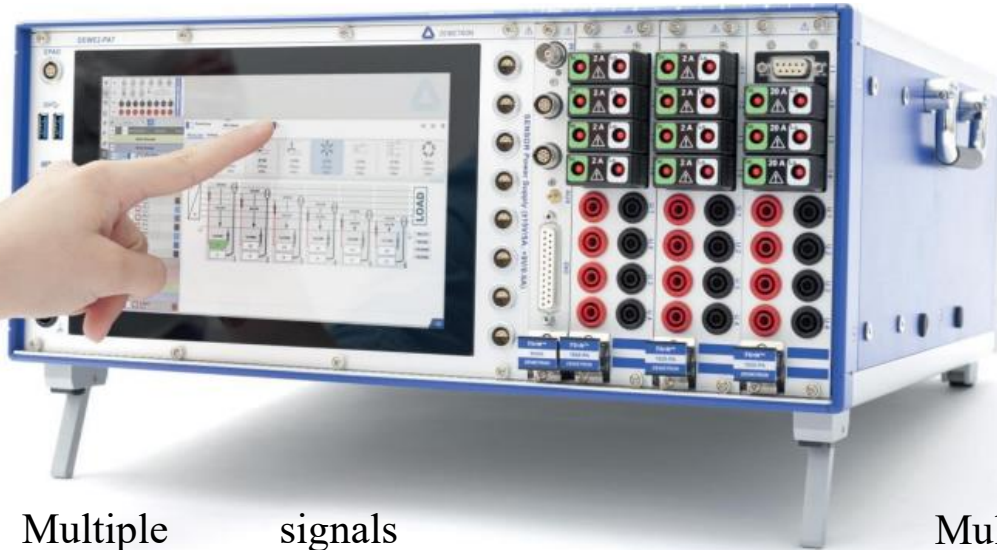


Measured Difference

Integrated Signal Power Analyzer

High performance power analyzer

Multiple signals synchronized for continuous storage and recording



0.03% measurement error

10 MS /S/CH

16 phases Power

Signal Continuity Storage

2 TB Storage Hard Disk

Multiple signals

Multi-group power testing

Storage Record

DVT power analyzers can support a variety of signals to store records, which means that customers only need one device to complete the various signals with a single device:

- > Modular setup, multiple signal inputs
- > Isolated high voltage & current inputs
- > High-performance power-assisted signal testing (e.g. torque, speed, vibration, etc.)

- > CAN Bus Test and CAN Output
- > Ethernet-based EtherCAT, XCP, SCPI Data Transfer
- > Support for large, low-speed acquisition channels for quasi-static and slow-change signal testing (e.g., temperature). large low-speed acquisition channels for quasi-static and slow-change signal testing (e.g. temperature)
- > PTP, GPS, IRIG synchronization methods
- > Counter

Simultaneous

DVT power analyzers for simultaneous testing of multiple motors, inverter/inverters or complete drive systems. converters or complete drive systems at the same time. solutions.

Up to 16-phase power analysis calculations for a wide range of detailed power parameters. power parameters; Direct analysis of multi-stage motors (up to 9 phases) for detailed power parameters for multi-stage motors (up to 9 phases), obtaining detailed power parameters

Flexible Configuration Self-matching

The user can adjust the signal input type of the equipment at any time according to the test requirements. For a small amount of money, different signal conditioning modules (SUBs) can be purchased to meet the constantly updated test tasks and requirements.

Easy Calibration

Calibration information can be stored inside the SUB, so if you want to return a card or conditioning module to DEWETRON for calibration, you do not need to return the entire unit. This allows you to calibrate the modules in batches without affecting the operation of the unit.

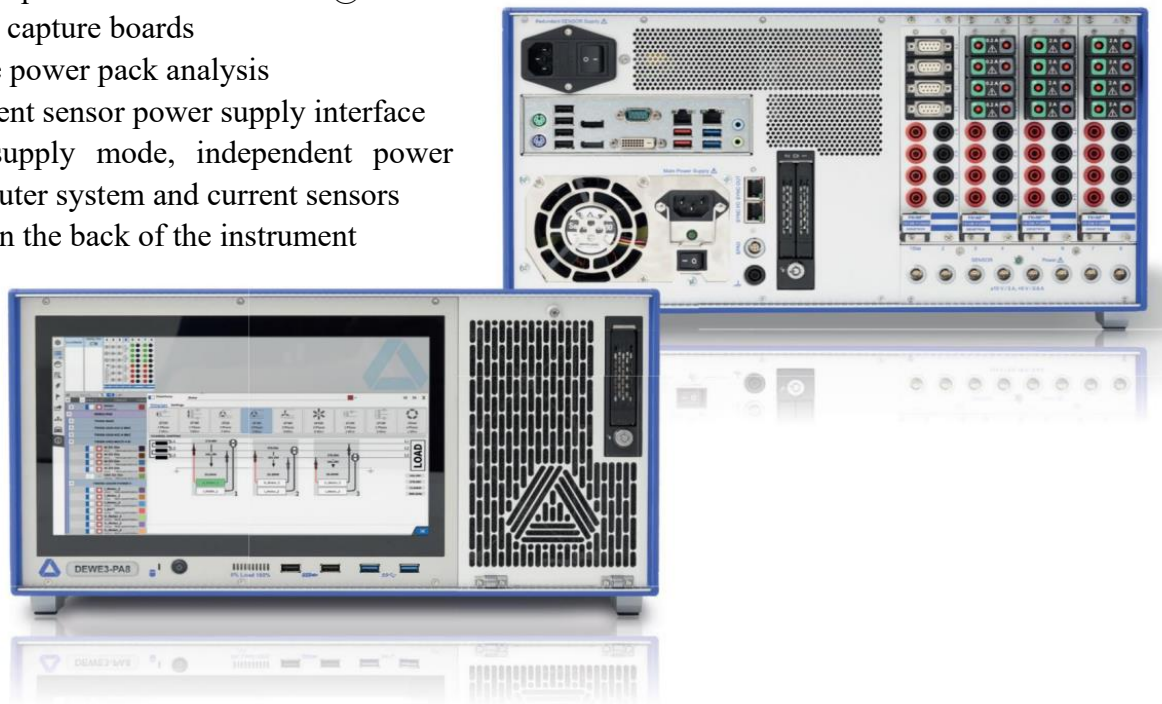
ISO 17025

Calibration specifications

Every power analyzer is factory calibrated and tested. The calibration is based on the EN ISO/IEC 17025 standard. All factory calibrations are done at our headquarters in Austria.

DEWE3-PA8

- >Sampling rates up to 10 MS/sec/channel @ 18-bit
- >8 x TRION3™ capture boards
- >Up to 16-phase power pack analysis
- >Integrated current sensor power supply interface
- >Dual power supply mode, independent power supply for computer system and current sensors
- >Signal inputs on the back of the instrument



DEWE3-PA7

- >Up to 2 MS/sec/channel @ 18-bit
- >7x TRION™ boards
- >Up to 12-phase power packs
- >Integrated Current Sensor Power Interface
- >Signal inputs on front panel



应用案例



New energy

Renewable energy sources, especially solar power and wind power, are becoming more and more common around the world, helping us to realize more green energy power supply.

DVT's modular design power analyzers can be used for DC and AC testing of new energy power, in addition to simultaneous testing of environmental and auxiliary signals such as light intensity, wind speed, pressure, and temperature. For distributed measurements at different grid or power station measurement points, DVT offers distributed synchronized test solutions (e.g. GPS synchronization).



Electric vehicle

Highly dynamic signal inputs, as well as precise current and voltage measurements up to 2000 V and 2000 A, enable the user to accurately analyze the dynamic signals of the entire drive chain. For example, from the high load condition when starting the vehicle forward, to the acceleration and braking behavior during driving. With an accuracy of up to 0.03 % of reading error (no range error) in the 1 KHz fundamental frequency range, DVT power analyzers provide a professional solution for R&D and test personnel in bench and real-time road tests.

Simultaneous acquisition of all data signals, high-precision calculation of electrical parameters (DC/AC), calculation of multiple power packs, and acquisition of auxiliary signals (RPM, temperature, torque, etc.) are just a few of the advantages of the DIVATron Power Analyzer. DIVATron's test solutions allow for the precise acquisition of all electrical, mechanical, and environmental parameters with absolute synchronization, without the need for additional equipment.



Powerhouse

For the maintenance and testing of power plants (generators, turbines, transformers, etc.), as well as for the monitoring of power parameters (active power, reactive power, apparent power, harmonic distortion, etc.), Dvitronics offers modular and flexible test solutions for long term monitoring or for precise power analysis. The equipment provided meets safety standards (CAT IV 600V CAT III 1000V).

Dvitronics solutions combine power analyzers and data loggers. Simultaneous acquisition of electrical and mechanical parameters is possible, and the measured and calculated values are stored synchronously.

技术参数



	DEWE2-PA7	DEWE3-PA8
Number of TRION™/ TRION3™ boards supported	7 TRION™	8 TRION™ / TRION3™
Maximum number of phases in the power pack	Up to 12 phases	Up to 16 phases
Sampling rate	Maximum 2 MS/s	Maximum 10 MS/s
Signal input position	Front	Back end
High speed channel expansion	TRIONet or OXYGEN-NET	
Low-speed channel extension 100 Hz	CPAD3 (via TRION-CAN)	
Quasi-static channel expansion	EPAD2 or CPAD2 (via TRION-CAN)	
Data storage	1 TB Solid State Drive	
Storage options	1 TB hard drive for data storage 120 GB solid state drive for operating system and software operation	(SSD-PCIe-1T-2T) 1TB to 2TB Industrial PCIe SSDs
Storage rate	Typ. 90 MB/s	Typ. 1 GB/s
Screen	9" Multi-Touch Display	11.6" Multi-Touch Display, HD High Definition
Power supply		
Input Voltage	90 to 264 VAC	
Sensor power supply	8-channel current sensor power supply (± 15 V / +9 V)	
Power Test/Basic Version Features		
RMS/average/peak-to-peak/phase angle of current and voltage	Cycle-by-cycle calculation, total and fundamental values can be calculated	
Active power/reactive power/apparent power	Cycle-by-cycle calculation, total and fundamental values can be calculated	
Voltage/current imbalance	Cycle-by-cycle calculation, fundamental value	
Energy	Total and fundamental/ total energy, forward and reverse	
Power Testing/Advanced Edition Features		
Voltage and current harmonics	Up to 1000, 2 to 9 kHz and 8 to 150 kHz, 10 or 12 cycles counting, based on IEC 61000-4-7, 3 harmonic grouping methods	
Voltage fluctuations	120 V / 230 V , 50 Hz / 60 Hz, IEC61000-4-15	
Flicker emission	IEC61400-21	
Mechanical power	Mechanical power, speed, torque, efficiency (requires motor option)	
Overall dimensions		
Dimensions (W x D x H) without handles and feet	441 x 427 x 177 mm(17.4 x 16.8 x 7 in.)(4 u plus 1 u for cooling in cabinet required)	441 x 435 x 222 mm(17.4 x 17.1 x 8.7 in.)(5 u)
Weight (bare metal without boards)	Typ. 13 kg (28.6 lb.)	Typ. 14 kg (30.9 lb.)