

E-MOBILITY

Battery powered vehicles are becoming more and more common on our roads and in our lives. DEWETRON is your competent partner to analyze, test and verify e-bikes, e-scooters and other electric vehicles during real drive tests.

YOUR BENEFITS

- > Portable and flexible battery powered Power Analyzer
- > Precision and synchronous calculation of several power groups
- > Determination of efficiency and losses during real drive and charging
- > Recording of dynamic processes
- > Synchronous sampling up to 10 MS/S/ch
- > High-speed isolated amplifiers
- > Additional data: pressure, temperature, vibration, strain, CAN-bus data and GPS

POWER ANALYZER

There is the need for high performance and accurate measurement solutions to determine the efficiency of electrical motors and to perform measurements and analysis according to national and international standards, DEWETRON's Power Analyzers are multichannel solutions for you motor tests. Synchronous acquisition of all input channels, high accuracy

power calculation for several motors (DC and AC) and the possibility to capture environmental parameters are just a few benefits of DEWETRON Power Analyzer. With the modular product concept a single DEWETRON system is able to capture electrical parameters, mechanical parameters, and environmental parameters absolutely synchronously, and precisely without any additional devices.

MEASURED AND CALCULATED VALUES

Active power, reactive and apparent power, power factor, mechanical power, losses and efficiency, dynamical car parameters, speed, torque, rotation speed and many more.

SYNCHRONOUS INPUT SIGNALS



CURRENT



VOLTAGE



ACCELERATION

ROTATIONAL RATES

SPEED



TORQUE

GPS



CAN-BUS DATA



FLEXRAY DATA



VIDEO DATA



BATTERY TEMPERATURE

INTERIOR TEMPERATURE



RESULTS

- > Online power calculation for two 3-phase power groups
- > DC power calculation for battery power, air-conditioner and heater
- > Efficiency calculation for drive train during real drive cycles
- > Calculation of mechanical power
- > Capture of distance, up and downhill drive
- > Analysis of efficiency, PF and losses
- > Analysis of temperature influence

OXYGEN WITH POWER OPTION

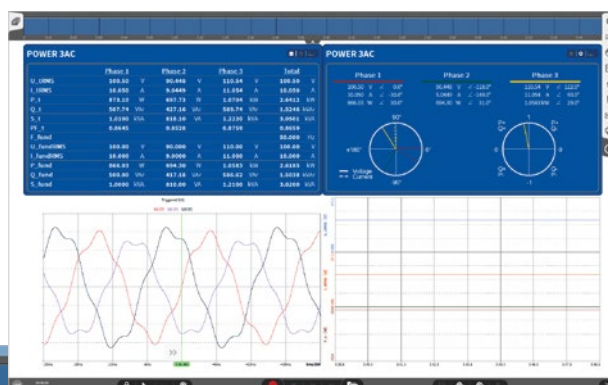
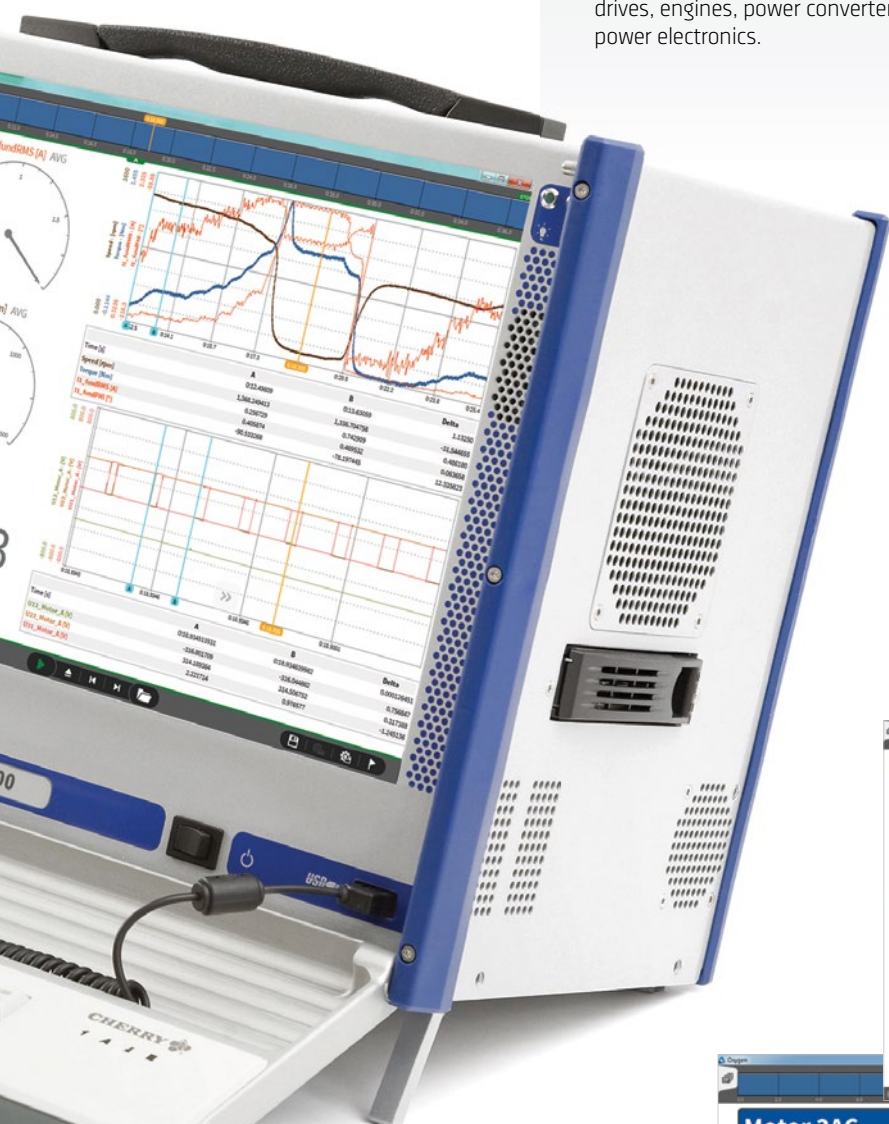
Our measurement software OXYGEN with Power option seamlessly integrates data being transmitted through multiple, totally synchronized signals into calculations for power analysis. A DEWETRON system with OXYGEN + Power option can do much more than any other power analyzer. One DEWETRON system is capable of both Multi Power Analysis and Mixed Signal Analysis. OXYGEN + Power option turns a DEWETRON system into a Mixed Signal Power Analyzer capable of analyzing system behavior, static and dynamic efficiency and losses on electric drives, engines, power converters and power electronics.

KEY FEATURES OF OXYGEN

- > Simple power group creation by ticking the desired channels
- > Several power groups with different frequencies and variable sync sources
- > 1-7 phases for each power group
- > Preview table in details setup
- > Dedicated power instrument with overview table, vector scope and harmonics
- > Total and fundamental values of voltage, current and power
- > Fundamental frequency support from 0.2 Hz to 1500 Hz or DC
- > Gapless calculation for reliable results
- > Update rate down to 10 ms

POWER INSTRUMENTS

It's a Multi Power Analyzer! You can simply "drag'n drop" power analyzer instruments to the screen and arrange them to your needs. The table tab provides an excellent overview of all important values, like frequency, true RMS, fundamental and total aggregated values. Additionally, the vector scope and harmonic tab complete the view of power analysis.



CONFIGURATION
EXAMPLES



	DEWE2-A4	DEWE-2600-PA
Analog input channels	2 free slots for TRION™ series modules	16
Digital channels	8 DIO and 2 CTR or 8 DI	
Channel expansion	Yes	
CAN interfaces	4	Optional
Video	DEWE-CAM-GIGE-120 or USB	
Display	13" display (1280 x 800)	15.4" TFT wide-screen with multi-touch screen (1280 x 800)
Power supply	11 to 32 V _{DC} rated (max. 10 to 36 V _{DC}) isolated; external AC power supply adapter included	90 to 264 V _{AC} (max.) Optional 18 to 24 V _{DC} (external AC power supply included)
Dimensions (W x D x H)	318 x 253 x 128 mm (12.5 x 10 x 5 in.)	417 x 246 x 303 mm (16.4 x 9.7 x 11.9 in.)
Weight	Typ. 5.9 kg (13 lb.)	Typ. 14 kg (31 lb.)
TRION™ and DAQP series modules are available for almost all kinds of sensors		

SENSORS &
ACCESSORIES



PNA-CLAMP-150-DC
Current clamps



PM-CM-400
Current transducers



BAT-CHARGER-4
Desktop battery charger
for 4 batteries