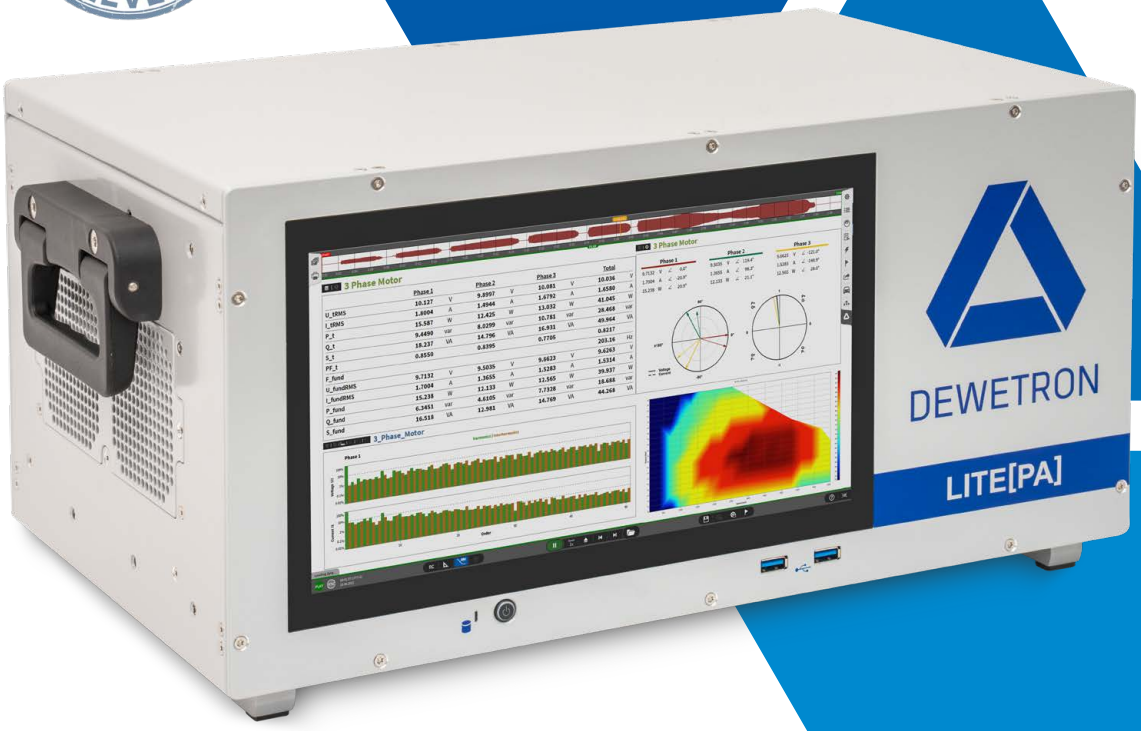
Anritsu GROUP COMPANY

CERTIFIED CMMC 2.0 LEVEL 2

DEWETRON



LITE[PA]

THE EASIEST TO INTEGRATE HIGH-PRECISION POWER ANALYZER

LITE[PA] BY DEWETRON

DEWETRON's LITE[PA] is a high-precision Power Analyzer with 4 or 8 phases. The proven input modules guarantee highly precise measurement results and offer the user enough flexibility to use all common current sensors. Inputs for speed and torque are available as standard and make the LITE[PA] suitable for testing electric motors. In addition, the system architecture offers a variety of interfaces, such as CAN, Ethernet and USB, for data exchange.

> Most intuitive user interface for direct device operation, e.g. in laboratory use
> Effortless data connection to host systems for remote controlled test stand or end-of-line applications

SELECTABLE CURRENT INPUTS

Selectable sub-modules for compatibility to all current sensors and direct current measurement.

0.1 A_{RMS} to 20 A_{RMS}

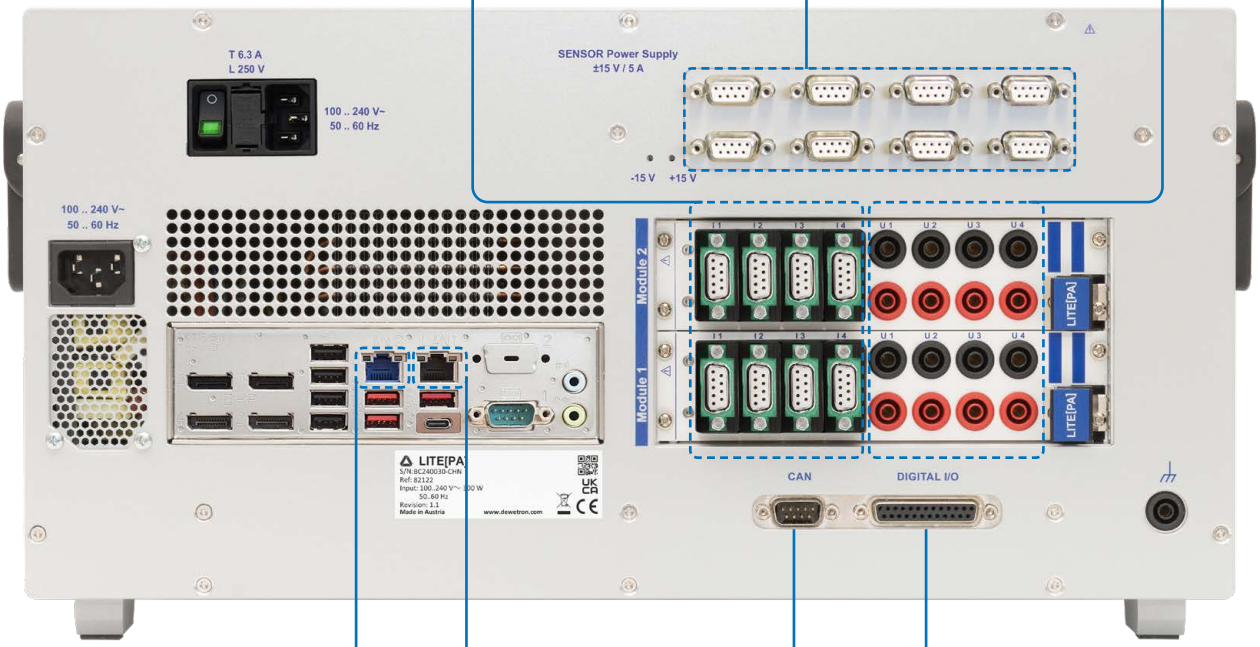
SENSOR SUPPLY

8 x integrated current transducer power supply

VOLTAGE INPUTS

Fixed inputs for high-voltages

±2000 V_{PEAK}
Bandwidth: 5 MHz
Sampling rate: 10 MS/s
Saftety: CAT III 1000 V



ETHERNET

ETHERNET

SCPI
XCP
UDP

HOST SYSTEM

XR-TH8-S

CAN

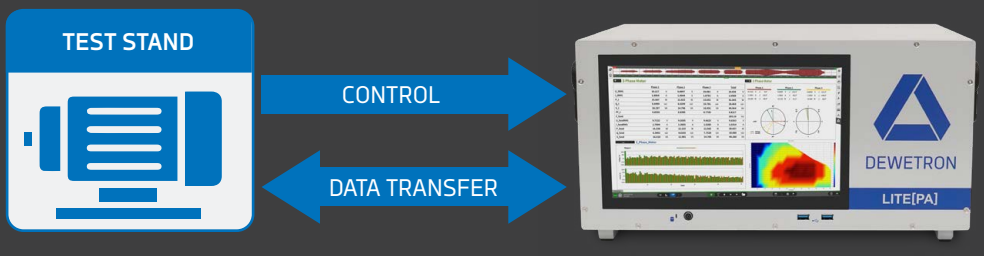
HOST SYSTEM

DIGITAL IN-/OUT

SPEED
TORQUE
FREQUENCY

DATA CONNECTION TO HOST SYSTEMS

The LITE[PA] is ready to be easily integrated into a wide variety of host systems. In addition to the CAN-bus, the data can also be transmitted via Ethernet, with various protocols such as SCPI or XCP. The remote control is usually done via SCPI; extensive commands are available to e.g. load predefined setups, make trigger settings, etc.



HIGH-VOLTAGE & CURRENT INPUTS

The LITE[PA] features 4 or 8 fixed high-voltage inputs and 4 or 8 selectable sub-modules to connect all state of the art zeroflux transducers.

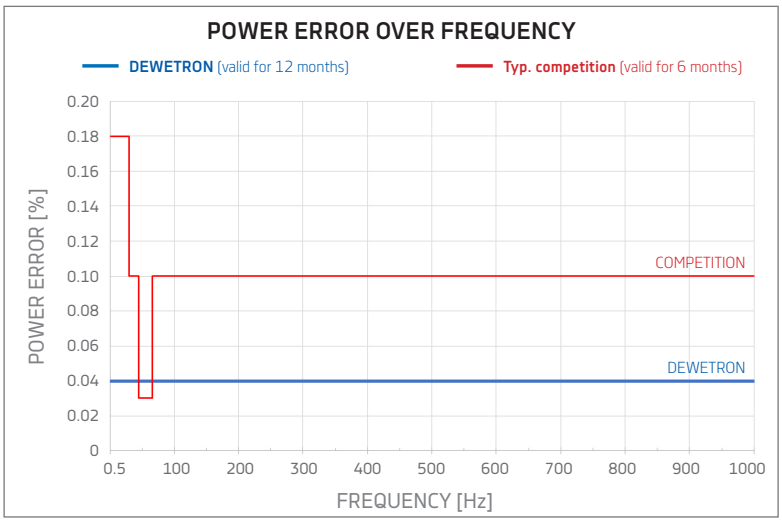
FIXED HIGH-VOLTAGE INPUTS	RANGE	SAFETY	BANDWIDTH	CONNECTOR	USER-EXCHANGEABLE
Voltage input U1, U2, U3, U4 	1000 V_{RMS} (±2000 V_{PEAK})	CAT IV 600 V / CAT III 1000 V	5 MHz	Safety banana	No

	SUB-MODULE		RANGE	SAFETY	BANDWIDTH	CONNECTOR	USER-EXCHANGEABLE
CURRENT	**Current transducer module** (= standard sub-module in LITE[PA])		1 A_{RMS} (±2 A_{PEAK}) 0.5 A_{RMS} (±1 A_{PEAK}) 0.25 A_{RMS} (±0.5 A_{PEAK}) 0.1 A_{RMS} (±0.2 A_{PEAK})	Not isolated. Depending on connected clamp	5 MHz	D-SUB-9 socket	Yes
	20 A module		20 A_{RMS} (±40 A_{PEAK})	CAT II 600 V, unfused	300 kHz	Safety banana (male)	
	2 A module		2 A_{RMS} (±4 A_{PEAK})				
	1 A module		1 A_{RMS} (±2 A_{PEAK})				
	0.2 A module		0.2 A_{RMS} (±0.4 A_{PEAK})				
VOLTAGE	**1 V module**		1 V_{RMS} (±2 V_{PEAK})	Not isolated. Depending on connected clamp	5 MHz	D-SUB-9 socket	
	5 V modules		5 V_{RMS} (±10 V_{PEAK})		5 MHz	D-SUB-9 socket	
					100 kHz	D-SUB-9 socket	
	XV module (seamless auto-range)		600 V_{RMS} (±1000 V_{PEAK}) 60 V_{RMS} (±100 V_{PEAK}) 6 V_{RMS} (±10 V_{PEAK}) 0.6 V_{RMS} (±1 V_{PEAK})	CAT II 600 V, isolated	300 kHz	Safety banana	

HIGH ACCURACY - WIDEBAND

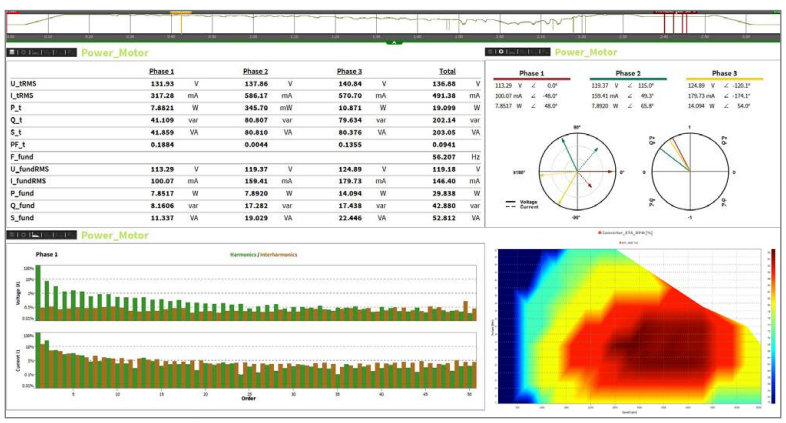
The power accuracy of DEWETRON's LITE[PA] is stunning. Compared to other Power Analyzers available on the market, it offers a **constant power accuracy of 0.04 %** from 0.5 Hz to 1000 Hz fundamental frequency. High-precision measurements over a wide frequency range are a central requirement for test stand applications.

The LITE[PA] is delivered with a **factory calibration certificate.** An accredited calibration, traceable according to **ISO 17025**, can be done on request. The correction values for calibration are stored on the input modules, so it is sufficient to send only the modules and not the entire system for calibration. Since down-times have to be minimized, spare input modules can simply be plugged in to bridge the calibration time.



OXYGEN USER SOFTWARE

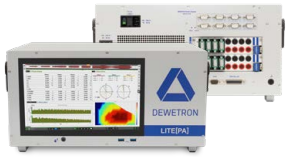
The LITE[PA] comes with our easy-to-use OXYGEN software. Within a minute, the basic measurement setup is ready, e.g. a 6-phase system with 1000 A current transformers, and all the typical power parameters are available to be displayed and stored. The user is free to design his or her own views by selecting from a variety of displays and assigning signals using drag and drop. Additional online data processing such as mathematics, special statistics, filtering, etc. is easily possible at any time. Also, the efficiency map of a drive train can be calculated and displayed directly during the measurement.
For offline analysis and reporting tasks, the software can be **installed license-free on any number of analysis PCs.**



LITE[PA] SPECIFICATIONS	
POWER accuracy 0.5 Hz to 1000 Hz (1 year)	0.04 %
Sampling rate	Up to 10 MS/s
Resolution	≤ 2 MS/s: 24-bit; >2 MS/s: 18-bit
Bandwidth	Up to 5 MHz
Temperature measurement	Via XR-series modules
Internal storage capacity	256 GB
Display	11,6" multi-touch wide-screen, full HD
Data visualization	Freely configurable and arrangeable, multiple view screens
Advanced data processing	Formulas, filters, statistics, FFT, etc. (online and post processing)
Reporting	Integrated reporting, many export data formats (*.xlsx, *.mat, *.dat, *.csv., etc.)
Data sharing and offline analysis	Unlimited free VIEW licenses for workgroups (for multiple analysis PCs)
Host system data connection	CAN, Ethernet (SCPI, XCP, UDP)
Power supply	90 .. 264 V_{AC}

POWER ANALYZERS IN COMPARISON

We are sure that you will find the right power analyzer at DEWETRON. The table below shows the main differences between the "Standard Power Analyzer" LITE[PA] and the "Advanced Power Analyzer" models.



	LITE[PA]	DEWE3-PA SERIES	PA-TRIONet3
Instrument type	All-in-one, turnkey	All-in-one, turnkey	Front-end, USB3 or LAN to PC
Number of phases	4 or 8	Up to 16	4
Sampling rate	10 MS/s	10 MS/s	1 MS/s
Internal storage capacity	256 GB	Up to 4 TB	According to used PC
POWER accuracy 0.5 Hz to 1000 Hz	0.04 %	0.04 %	0.04 %
Harmonics analysis, flicker analysis, IEC conformity	✓	✓	✓
Advanced Math: formula, FFT, statistics, etc.	✓	✓	✓
Motor evaluation: speed, torque, angle, efficiency map	✓	✓	-
19" rack-mountable	✓	✓	-
Host system data connection CAN | Ethernet (UDP, SCPI, XCP)	✓ | ✓	✓ | ✓	- | ✓ (Ethernet of used PC)
Export to common file formats: .xlsx, .mat, .dat, .csv., etc.	✓	✓	✓
Additional low-speed inputs (max. 200 Hz) via XR-modules (thermocouple, RTD, 0-20 mA, V)	✓	✓	-
Additional mixed signal high-speed inputs Vibration, sound, strain, etc.	-	✓	-
Host system data connection via EtherCAT	-	✓	-
Raw data waveform recording	-	✓	✓
User-exchangable input modules	-	✓	✓
Built-in current transducer power supply	✓	✓	-
SYNC IRIG | PTP | GPS | TRION-SYNC	- | - | - | -	✓ | ✓ | ✓ | ✓	- | - | - | ✓
DIMENSIONS			
Dimensions (W x D x H) without feet and handle	442 x 281 x 222 mm (5 u) (17.4 x 11.1 x 8.7 in.)	442 x 435 x 222 mm (5 u) (17.4 x 17.1 x 8.7 in.)	320 x 205 x 55 mm (12.6 x 8 x 2.2 in.)
Weight	4 ch: 9 kg (19.8 lb.) 8 ch: 9.5 kg (21 lb.)	Depending on configuration Typ. 14 kg (30.9 lb.)	Typ. 1.9 kg (4.2 lb.)

ABOUT DEWETRON

DEWETRON is a manufacturer of precision test and measurement systems and part of the globally operating Anritsu Group. Our reliable measurement data help customers worldwide make processes more predictable, efficient, and safer.

THE MEASURABLE DIFFERENCE.

Get to know our
GLOBAL OFFICES

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