



DEWETRON

▼

DW2-CLAMP-DC-POWER-8

TECHNICAL REFERENCE MANUAL

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WELCOME TO THE WORLD OF DEWETRON!

Congratulations on your new device! It will supply you with accurate, complete and reproducible measurement results for your decision making.

Look forward to the easy handling and the flexible and modular use of your DEWETRON product and draw upon more than 25 years of DEWETRON expertise in measurement engineering.

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ISO9001



THE MEASURABLE DIFFERENCE.

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Thank you!

Thank you very much for your investment in DEWETRON's unique data acquisition systems. These are top-quality instruments which are designed to provide you years of reliable service. This guide has been prepared to help you get the most from your investment, starting from the day you take it out of the box, and extending for years into the future.

This guide includes important startup notes, as well as safety notes and information about keeping your DEWETRON system in good working condition over time.

We strongly suggest that you read this entire manual, especially the safety and care sections, as well as to avoid damaging your DEWETRON system.

What is the DW2-CLAMP-DC-POWER-8 Box?

The DW2-CLAMP-DC-POWER-8 box is designed for connecting up to eight current clamps to a DEWE2/DEWE3 instrument. The box comes with an integrated power supply for up to eight current clamps ($\pm 15\text{ V} / +9\text{ V}$), as well as a power supply connector for the instrument (11 to 32 V_{DC}).

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PREFACE

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Training

DEWETRON offers training at various offices around the world several times each year. DEWETRON headquarters in Austria have a very large and professional conference and seminar center, where training classes are conducted on a regular basis starting with sensors and signal conditioning, A/D technology and software operation. For more information about training services, please visit:

<http://www.dewetron.com/services/dewetron-academy/>

Dewetron Inc. in the USA also has a dedicated training facility connected to its headquarters, located in Rhode Island. For more information about training services in the US, please visit:

<http://www.dewetron.us/service-support/system-training-usa/>

Calibration

Every instrument needs to be calibrated at regular intervals. The standard norm across nearly every industry is annual calibration. Before your DEWETRON data acquisition system is delivered, it is calibrated at our DEWETRON headquarter. Each of this system is delivered with a certificate of compliance with our published specifications. Detailed calibration reports from our calibration system are available for purchase with each order. We retain them for at least one year, so calibration reports can be purchased for up to one year after your system was delivered.

Support

DEWETRON has a team of people ready to assist you if you have any questions or any technical difficulties regarding the system. For any support please contact your local distributor first or DEWETRON directly.

For Asia and Europe, please contact:

DEWETRON GmbH
Parkring 4
8074 Grambach
AUSTRIA
Tel.: +43 316 3070
Fax: +43 316 307090
Email: support@dewetron.com
Web: <http://www.dewetron.com>

The telephone hotline is available
Monday to Friday between
08:00 and 17:00 CET (GMT +1:00)

For the Americas, please contact:

DEWETRON, Inc. (HQ USA)
2850 South County Trail, Unit 1
East Greenwich, RI 02818
U.S.A.
Tel.: +1 401 284 3750
Toll-free: +1 866 598 3393
Fax: +1 401 284 3755
Email: us.support@dewetron.com
Web: <http://www.dewetron.us>

The telephone hotline is available
Monday to Friday between
08:00 and 4:30 EST

Service/Repair Policy

We are very sorry that your DEWETRON system is not operating properly. Our team is here to ensure that your DEWETRON product is returned to peak performance as quickly as possible.

Please help us to help you by following the RMA policy.

Some problems can be solved remotely by our support team. To facilitate a quicker resolution to the problem and save unnecessary shipping costs, we ask you to first have your problem investigated by our technical support before sending your product. Contact details for our support can be found on our [website](#). Please describe the error accurately and with as much detail as possible. This helps expedite the repair process.

If a repair is necessary, please complete our [online RMA form](#). You will then receive an RMA (Return Material Authorization) number and detailed instructions that identify where to ship the damaged product.

Please note: Products arriving at our repair department without RMA require follow-up calls and investigation, which lead to longer turnaround. Only the team of DEWETRON is allowed to perform any kinds of repairs to your system to assure a safe and proper operation in future.



Any spare parts (screws, backplanes, cables,...) must be obtained from DEWETRON only.



NOTICE

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Warranty Information

A copy of the specific warranty terms applicable to your DEWETRON product and replacement parts can be obtained from your local sales and service office.

Restricted Rights Legend

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DEWETRON GmbH
Parkring 4
A-8074 Grambach / Austria

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Safety conventions



Observe precautions for handling electrostatic sensitive devices!



This icon denotes a caution, which advises you of precautions to take to avoid injury, data loss, or a system crash. When this symbol is marked on the product, refer to the technical reference manual.



Indicates hazardous voltages.



Indicates the chassis terminal

WARNING *Calls attention to a procedure, practice, or condition that could cause bodily injury or death.*

CAUTION *Calls attention to a procedure, practice, or condition that could possibly cause damage to equipment or permanent loss of data.*

WARNINGS

The following general safety precautions must be observed during all phases of operation, service, and repair of this product. Failure to comply with these precautions or with specific warnings elsewhere in this manual violates safety standards of design, manufacture, and intended use of the product. DEWETRON GmbH assumes no liability for the customer's failure to comply with these requirements.

SAFETY INSTRUCTIONS

Your safety is our primary concern! Please be safe!



General safety and hazard warnings for all DEWETRON systems

- > Use this system under the terms of the specifications only to avoid any possible danger. If the unit is used in a manner not specified by the manufacturer the protection can be impaired!
- > This product is intended for use in industrial locations. As a result, this product may cause interference if used in residential areas. Such use must be avoided unless the user takes special measures to reduce electromagnetic emissions to prevent interferences to the reception of radio and television broadcasts.
- > Maintenance will be executed by qualified staff only.
- > During the use of the system, it might be possible to access another parts of a more comprehensive system. Please read and follow the safety instructions provided in the manuals of all other components regarding warning and security advices for using the system.
- > With this product, only use the power cable delivered or defined for the host country.
- > DO NOT connect or disconnect sensors, probes or test leads, as these parts are connected to a voltage supply unit.
- > The system is grounded via a protective conductor in the power supply cord. To avoid electric shocks, the protective conductor has to be connected with the ground of the power network. Before connecting the input or output connectors of the system, make sure that there is a proper grounding to guarantee potential free usage. For countries, in which there is no proper grounding, please refer to your local legally safety regulations for safety use.

DC systems: Every DC system has a grounding connected to the chassis (yellow/green safety banana plug).

- > Please note the characteristics and indicators on the system to avoid fire or electric shocks. Before connecting the system, please carefully read the corresponding specifications in the product manual.
- > The inputs are not, unless otherwise noted (CATx identification), for connecting to the main circuits of category II, III and IV. The measurement category can be adjusted depending on module configuration.
- > The power cord separates the system from the power supply. Do not block the power cord, since it has to be accessible for the users.
- > Supply overvoltage category is II.
- > DO NOT use the system if equipment covers or shields are removed.
- > If you assume the system is damaged, get it examined by authorised personnel only.
- > Any use in wet rooms, outdoors or in adverse environmental condition is not allowed!
Adverse environmental conditions are:
 - > Moisture or high humidity
 - > Dust, flammable gases, fumes or dissolver
 - > Thunderstorm or thunderstorm conditions (except assembly PNA)
 - > Electrostatic fields, et cetera.
- > Any direct voltage output is protected with a fuse against short cut and reverse-polarity, but is NOT galvanically isolated (except it is explicit marked on the system).
- > The system must be connected and operated to an earthed wall socket at the AC mains power supply only (except for DC systems).
- > Any other use than described above may damage your system and is attended with dangers like shortcut, fire or electric shocks.

SAFETY INSTRUCTIONS

- > The whole system must not be changed, rebuilt or opened (except for changing TRION™ modules).
 - > If you assume a more riskless use is not provided anymore, the system has to be rendered inoperative and should be protected against inadvertent operation. It is assumed that a more riskless operation is not possible anymore, if
 - > the system is damaged obviously or causes strange noises.
 - > the system does not work anymore.
 - > the system has been exposed to long storage in adverse environmental.
 - > the system has been exposed to heavy shipment strain.
 - > DO NOT touch any exposed connectors or components if they are live wired. The use of metal bare wires is not allowed. There is a risk of short cut and fire hazard!
 - > Warranty void if damages caused by disregarding this manual. For consequential damages NO liability will be assumed!
 - > Warranty void if damages to property or persons caused by improper use or disregarding the safety instructions.
 - > Unauthorized changing or rebuilding the system is prohibited due to safety and permission reasons (CE). Exception: changing DAQP/PAD/HSI/TRION™/TRION3™ modules.
 - > The assembly of the system is equivalent to protection class I. For power supply, only the correct power socket of the public power supply must be used, except the system is DC powered.
 - > Be careful with voltages $>25 V_{AC}$ or $>35 V_{DC}$! These voltages are already high enough in order to get a perilous electric shock by touching the wiring.
 - > Unless otherwise stated, maximum input voltage for measuring cards are $70 V_{DC}$ and $46.7 V_{PEAK}$.
 - > The product heats during operation. Make sure there is adequate ventilation. Ventilation slots must not covered!
 - > Only fuses of the specified type and nominal current may be used. The use of patched fuses is prohibited.
 - > Prevent using metal bare wires! Risk of short cut and fire hazard!
 - > DO NOT use the system before, during or shortly after a thunderstorm (risk of lightning and high energy overvoltage). An advanced range of application under certain conditions is allowed with therefore designed products only. For details please refer to the specifications.
 - > Make sure that your hands, shoes, clothes, the floor, the system or measuring leads, integrated circuits and so on, are dry.
 - > DO NOT use the system in rooms with flammable gases, fumes or dust or in adverse environmental conditions.
 - > Avoid operation in the immediate vicinity of:
 - > high magnetic or electromagnetic fields
 - > transmitting antennas or high-frequency generators
- For exact values please refer to enclosed specifications.
- > Use measurement leads or measurement accessories aligned to the specification of the system only. Fire hazard in case of overload!
 - > Do not switch on the system after transporting it from a cold into a warm room and vice versa. The thereby created condensation may damage your system. Acclimatise the system unpowered to room temperature.
 - > Do not disassemble the system! There is a high risk of getting a perilous electric shock. Capacitors still might be charged, even the system has been removed from the power supply.

SAFETY INSTRUCTIONS

- > Direct exposure of any DEWETRON product to strong sunlight or other heat radiation shall be prevented, as this could excessively heat up the product and lead to permanent damage of the product.
- > The electrical installations and equipments in industrial facilities must be observed by the security regulations and insurance institutions.
- > The use of the measuring system in schools and other training facilities must be observed by skilled personnel.
- > The measuring systems are not designed for use at humans and animals.
- > Please contact a professional if you have doubts about the method of operation, safety or the connection of the system.
- > Please be careful with the product. Shocks, hits and dropping it from already lower level may damage your system. For exact values please refer to enclosed specifications.
- > Please also consider the detailed technical reference manual as well as the security advices of the connected systems.

This product has left the factory in safety-related flawless and proper condition.

In order to maintain this condition and guarantee safety use, the user has to consider the security advices and warnings in this manual.

EN 61326-3-1:2008

IEC 61326-1 applies to this part of IEC 61326 but is limited to systems and equipment for industrial applications intended to perform safety functions as defined in IEC 61508 with SIL 1-3.

The electromagnetic environments encompassed by this product family standard are industrial, both indoor and outdoor, as described for industrial locations in IEC 61000-6-2 or defined in 3.7 of IEC 61326-1. Equipment and systems intended for use in other electromagnetic environments, for example, in the process industry or in environments with potentially explosive atmospheres, are excluded from the scope of this product family standard, IEC 61326-3-1.

Devices and systems according to IEC 61508 or IEC 61511 which are considered as “operationally well-tried”, are excluded from the scope of IEC 61326-3-1.

Fire-alarm and safety-alarm systems, intended for protection of buildings, are excluded from the scope of IEC 61326-3-1.

Maintenance

The information in this section is designed for use by qualified service personal.

Service interval:

Clean dust from the chassis exterior/interior and exchange filter foam based on the operating environment.

Cleaning:

Clean surface of the chassis with dry lintfree cloth.

Use a dry velocity stream of air to clean the chassis interior.



- > Disconnect all cables before servicing the unit!
- > Many components within the chassis are sensitive to static discharge damage. Always wear a ground wrist strap and service the unit only in static-free environment.
- > Do not use harsh chemical cleaning agents!

GENERAL INFORMATION

CAUTION

- > The system BIOS is protected by password. Any change in the BIOS may cause a system crash. When the system is booting, do not press ESC-button on keyboard. This may clear the BIOS settings and cause system faults.
- > Any change in the file structure as deleting or adding files or directories might cause a system crash.
- > Before installing software updates contact DEWETRON or your local distributor. Use only software packages which are released by DEWETRON. Further informations are also available in the internet (<http://www.dewetron.com>).
- > After power off the system wait at least 10 seconds before switching the system on again. Otherwise the system may not boot correct. This prolongs also the life of all system components.

Windows updates and antivirus/security software

Before installing Windows software updates consult with DEWETRON for compatibility guidance. Please also keep in mind that the use of any antivirus or other security software may slow down your system and may cause data loss.

Problematic network stacks

Often intrusive IT software or network processes can interfere with the primary function of the DEWETRON system: to record data. Therefore we recommend strongly against the installation of IT/MIS software and running their processes on any DEWETRON data acquisition system, and cannot guarantee the performance of our systems if they are so configured.



Environmental Considerations

Information about the environmental impact of the product.

Product End-of-Life Handling

Observe the following guidelines when recycling a DEWETRON system:

System and Components Recycling

Production of these components required the extraction and use of natural resources. The substances contained in the system could be harmful to your health and to the environment if the system is improperly handled at it's end of life! Please recycle this product in an appropriate way to avoid an unnecessary pollution of the environment and to keep natural resources.

This symbol indicates that this system complies with the European Union's requirements according to Directive 2002/96/EC on waste electrical and electronic equipment (WEEE). Please find further information about recycling on the DEWETRON website www.dewetron.com

Restriction of Hazardous Substances

This product has been classified as Monitoring and Control equipment, and is outside the scope of the 2011/65/EU RoHS Directive. This product is known to contain lead.

DW2-CLAMP-DC-POWER-8 box

- > Box for connecting up to eight current clamps to a DEWE2/DEWE3-A4/-M4 instrument
- > Integrated power supply for current clamps (± 15 V, +9 V)
- > Small rugged housing for easy integration



System specifications

DW2-CLAMP-DC-POWER-8	
General specifications	
Input channels	8 channels for current clamps (incl. ± 15 V / +9 V power supply for current clamps)
Rated input voltage	11 to 32 V _{DC} (external power supply DEWE-POW-24-350 included)
Output	
Power supply for instrument	11 to 32 V _{DC} (one-to-one as input voltage, 20 A fused)
Power supply for current clamps	± 15 V, +9 V
Operating temperature	0 °C (with prewarmed unit) to +50 °C
Storage temperature	-20 °C to +70 °C
Humidity (operating)	10 % to 80 %, non condensing 5 % to 95 % rel. humidity
Power consumption	max. 170 W with 8 x CM1000, ~350 W depending on attached instrument at Lemo EGG.2B.302
Dimensions (L x W x H)	318 x 253 x 41.5 mm (12.5 x 9.9 x 1.6 in.)
Mass	1.77 kg (3.91 lb) w/o clamps
Connector overview	
Power supply input	2-pin LEMO EGG.3B.302
Power supply output (11 to 32 V _{DC})	2-pin LEMO EGG.2B.302
Power supply current clamps	6-pin LEMO ERA.1S.306 (8x)

General description

The DW2-CLAMP-DC-POWER-8 box is designed for connecting up to eight current clamps to a DEWE2 instrument. The box comes with an integrated power supply for up to eight current clamps (± 15 V / +9 V), as well as a power supply connector for the instrument (11 to 32 V_{DC}).

The DW2-CLAMP-DC-POWER-8 box usually can be used with any DEWE2/DEWE3 instrument but is primarily designed to match DEWE2/DEWE3-A4 & DEWE2/DEWE3-M4 instruments with a mechanical connection.



NOTE:

This box has no batteries installed and won't work as a battery backup! The box has to be constantly connected to the power supply and power network while operating.



WARNING:

Only the included power supply DEWE-POW-24-350 is capable of providing 300+ W output power and has to be used if a DEWE2/DEWE3 instrument is attached to the DW2-CLAMP-DC-POWER-8 box.

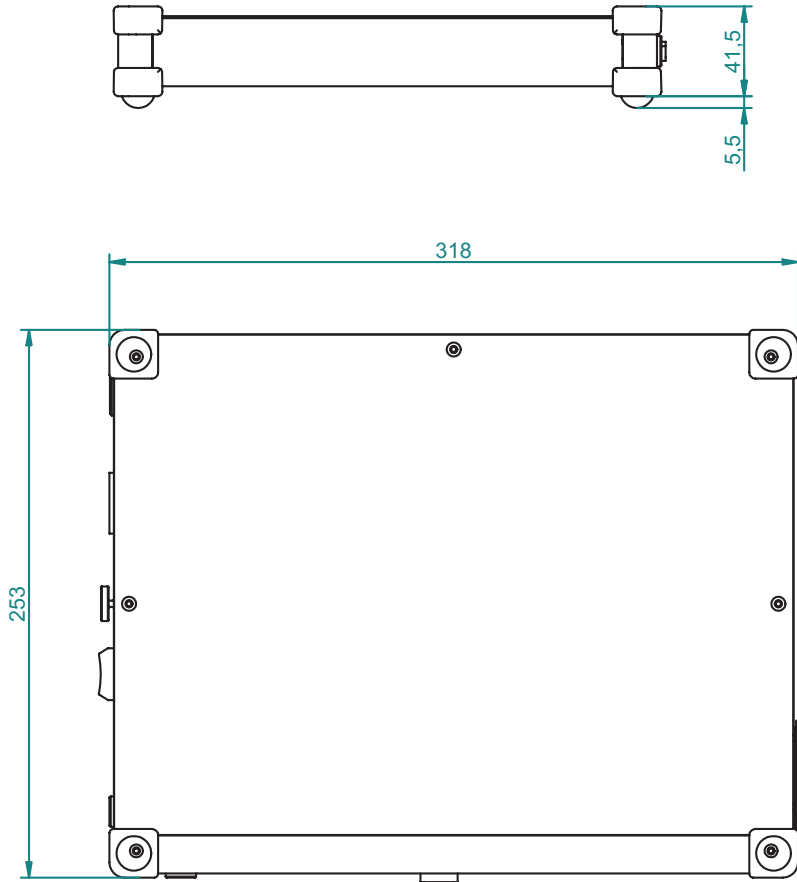


WARNING:

The DW2-CLAMP-DC-POWER-8 can't be operated by a DEWE-UPS-150 if a DEWE2 system is attached! The DEWE2/DEWE3 system has to be supplied separately!

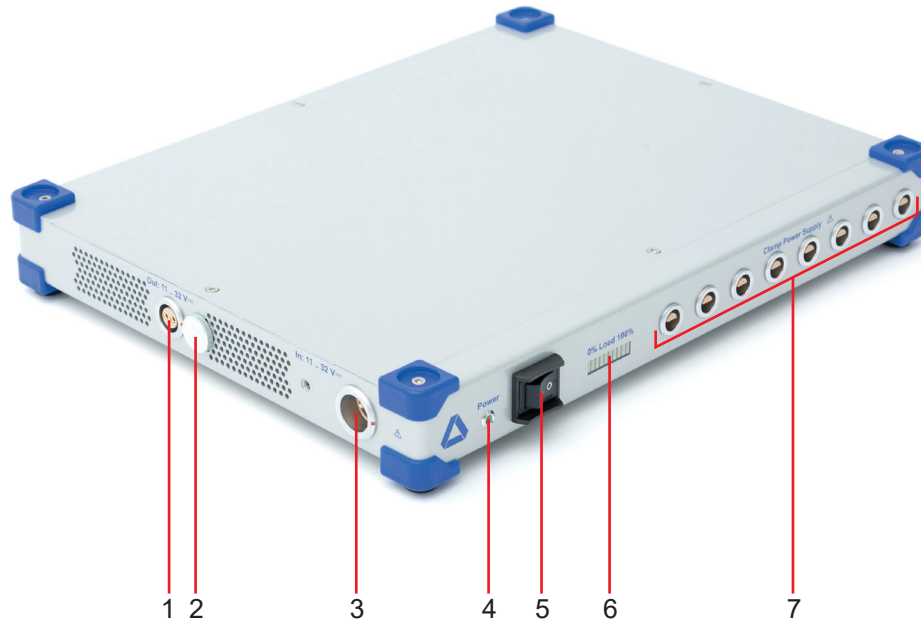
MAIN SYSTEM

Dimensions* DW2-CLAMP-DC-POWER-8-S1 box



* Dimensions in mm
(1 inch = 25.4 mm)

DW2-CLAMP-DC-POWER-8 box at a glance



- 1 Power supply output to instrument
(11 to 32 V_{DC}) Lemo EGG.2B.302
- 2 Screw for fixing aid
- 3 Power supply input
(11 to 32 V_{DC}) Lemo EGJ.3B.302
- 4 Power status LED
- 5 Power-on switch
- 6 LED display for load of current clamps
- 7 Power supply connectors for current clamps
(±15 V / +9 V) Lemo ERA.1S.306

Note: The amount and location of the connectors might vary!

MAIN SYSTEM

1 Power supply output to instrument

To supply your instrument with 11 .. 32 V_{DC}.



Lemo EGG.2B.302
Mating connector:

LEMO FGG.2B.302.CLAD52Z (for cable diameter 4.1 to 5.0 mm)
LEMO FGG.2B.302.CLAD62Z (for cable diameter 5.1 to 6.0 mm)

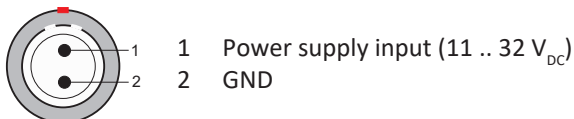
2 Screw for fixing aid

In case of using a DEWE2/DEWE3-A4/-M4 with a DW2-CLAMP-DC-POWER-8 box, you can place your DEWE2/DEWE3-A4/-M4 onto the box and fasten the screw of the fixing aid on both sides of the instrument. The fixing aids are included with the current clamp box.

3 Power supply input connector

The power supply input supports a voltage range from 11 to 32 V_{DC}.

Power supply pin assignment:



Lemo EGJ.3B.302

4 Power status LED

The LED displays the power status of the current clamp connectors.

5 Power-on/off switch

The power-on/off switch is used to switch on/off the power supply for the current clamp connectors.

WARNING: The power-on/off switch **will not** switch on/off the 11 .. 32 V_{DC} power output at the Lemo EGG.2B.302 connector!



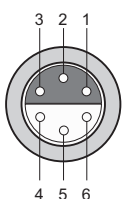
6 LED display for load of current clamps

The 10 Segment LED display indicates the total system load of the DW2-CLAMP-DC-POWER-8 box. One LED segment equals 10 %. When exceeding 80 % during active power measurement, consider using another box to split the power (e.g. when using 8 * PA-IT-1000).



7 Power supply connectors for current clamps

This connector supports ±15 V / +9 V current power probe supply for connecting current clamps. Further information see chapter '[Sensor power supply](#)'.



Lemo ERA.1S.306

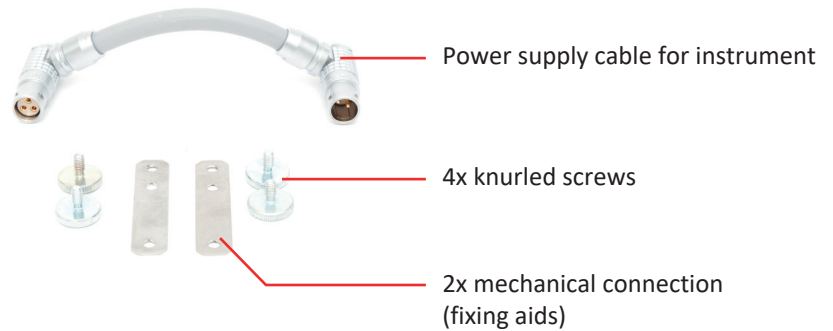
Pin assignment
1: +15 V
2: -15 V
3: +9 V
4: DGND
5: n.c.
6: DGND

Mating connector:
LEMO FFA.1S.306.CLADxx (xx = depending on cable diameter)

Assembly instructions (DEWE2/DEWE3-A4/-M4)

The DW2-CLAMP-DC-POWER-8 box usually can be used with any DEWE2/DEWE3 instrument but is primarily designed to match DEWE2/DEWE3-A4 & DEWE2/DEWE3-M4 instruments with a mechanical connection.

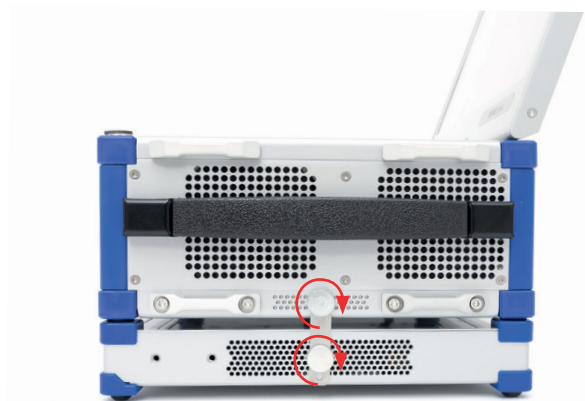
Needed parts (included with the box):



Place your System (DEWE2/DEWE3-A4/-M4) on the DW2-CLAMP-DC-POWER-8. Make sure it is exactly positioned upon the box and fasten the screws of the fixing aid on the right and the left side of the system.



DEWE2/DEWE3-A4 & DW2-CLAMP-DC-POWER-8 left side



DEWE2/DEWE3-A4 & DW2-CLAMP-DC-POWER-8 right side

Connect the power supply cable with the box and the instrument.



MAIN SYSTEM

Power supply

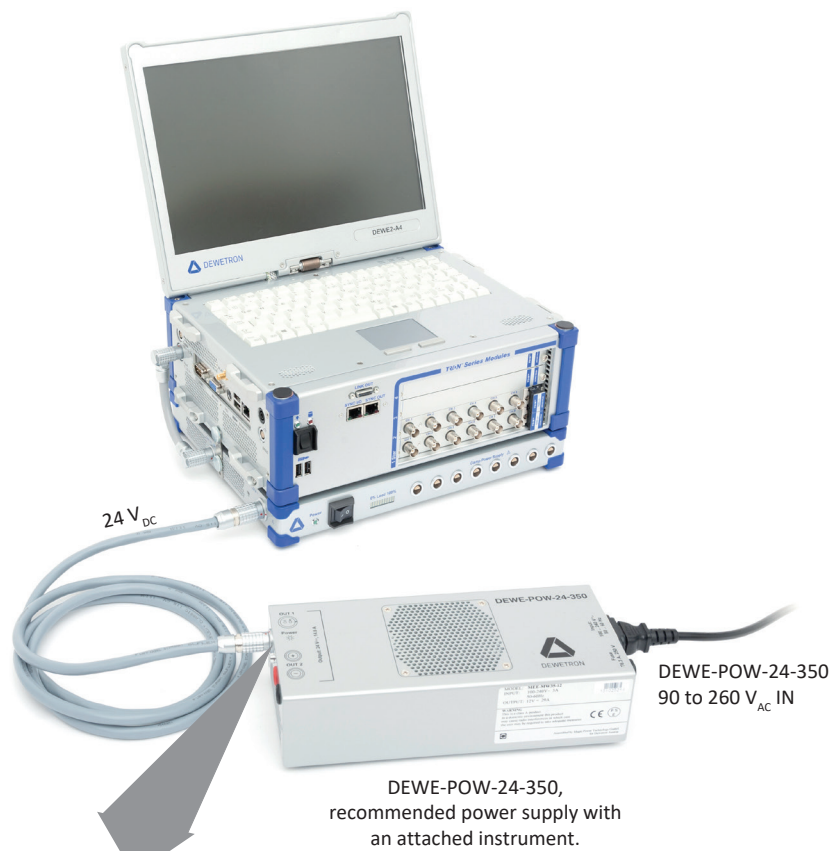
The DW2-CLAMP-DC-POWER-8 box comes with an external AC/DC power supply (DEWE-POW-24-350) and all required cables.



WARNING: Only the included power supply DEWE-POW-24-350 is capable of providing 300+ W output power and has to be used if a DEWE2/DEWE3 instrument is attached to the DW2-CLAMP-DC-POWER-8 box.



WARNING: The DW2-CLAMP-DC-POWER-8 can't be operated by a DEWE-UPS-150 if a DEWE2/DEWE3 system is attached! The DEWE2/DEWE3 system has to be supplied separately!



Lemo EGG.2B.302

External power supply specifications

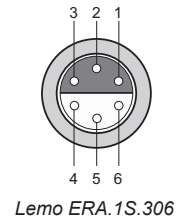
AC/DC power supply	DEWE-POW-24-350
Input:	
Rated input voltage:	100 to 240 V _{AC} (max. 90 to 264 V _{AC})
Input frequency:	47 to 63 Hz
Input current (typ.):	2 A @ 230 V _{AC} / 4 A @ 115 V _{AC}
Inrush current (typ.):	44 A @ 230 V _{AC} / 22 A @ 115 V _{AC}
Leakage current:	<2 mA @ 240 V _{AC}
P.F.C. (typ.):	0.95 @ 230 V _{AC} / 0.98 @ 115 V _{AC}
Output:	
Output voltage:	24 V
Min. load:	0 A
Rated load (free / fan):	12.5 A / 14.6 A
Output tolerance:	±2 %
Ripple & Noise (max.):	150 mV
Efficiency (typ.):	88 %
Output connector:	Banana jacks and LEMO EGG.2B.302
Protection:	
Overload:	105 % to 130 % constant current limiting, auto recovery
Over voltage:	26.7 to 32.4 V; Hiccup mode, auto recovery after fault has been removed
Over temperature:	> 80°C ±5°C detect on heat sink of power transistor Shutdown, auto recovery after temp. has fallen
Short circuit:	Yes
Setup time:	<2000ms @ 230V _{AC} / 4000ms @ 115V _{AC}
Rise time:	<100ms @ 230 V _{AC} / 100ms @ 115 V _{AC}
Holdup time:	16ms @ 230 V _{AC} / 16ms @ 115 V _{AC}
Withstand voltage:	I/P-O/P:3 KV _{AC} , I/P-FG:1.5 KV _{AC} , O/P-FG:0.5 KV _{AC} / 1 minute
Isolation resistance:	I/P-O/P, I/P-FG, O/P-FG: 500 V _{DC} / 100 MOhm
Switching frequency:	100 kHz
Temperature:	
Operating:	-10 to 65°C
Derating:	45 to 60°C: 2 %/°C (3.5 & 5 V: 40 to 65°C: 2 %/°C)
Storage:	-40 to 85°C
Humidity:	
Operating:	20 to 90 % RH
Storage:	10 to 95 % RH (non condensing)
M.T.B.F.:	> 106 K hours (according to MIL-HDBK-217F at 25°C environment)
Safety:	Approved: UL 60950-1 / TÜV EN60950-1
EMC:	
EMI	EN55022 Class B / EN61000-3-2,3
EMS	EN61000-4-2,3,4,5,6,8,11 / ENV50204
Dimensions (W x D x H):	248 x 106 x 62 mm (9.8 x 4.2 x 2.4 in.)
Weight:	1.7 kg (3.7 lbs)

MAIN SYSTEM

Sensor power supply



Output Power (SUM)	150 W
Output Current +15V Line (Single/Sum)	1.5 A / 5 A
Output Current -15V Line (Single/Sum)	1.5 A / 5 A
Output Current +9V Line (Single/Sum)	0.6 A / 0.6 A
Output Current (Single Plug)	1.5 A



Pin assignment
1: +15 V
2: -15 V
3: +9 V
4: DGND
5: n.c.
6: DGND

Compatible sensors/transducers (selection)

PA-IT-60/65	±15 V	
PA-IT-200/205	±15 V	
PA-IT-400/405	±15 V	
PA-IT-700	±15 V	
PA-IT-1000	±15 V	
PA-LF-310	±15 V	
SE-CUR-CLAMP-150-DC	±15 V	
SE-CUR-CLAMP-200-DC	±15 V	
SE-CUR-CLAMP-500-DC	±15 V	
SE-CUR-LFR	+9 V	

NOTE: The maximum cable length from the transducer to the device is 5 m. Longer cable lengths may cause a too high voltage drop.

NOTE: Do not use the zero-flux transducer system without power supply. Induction of currents can damage the built-in electronics (see user manual).

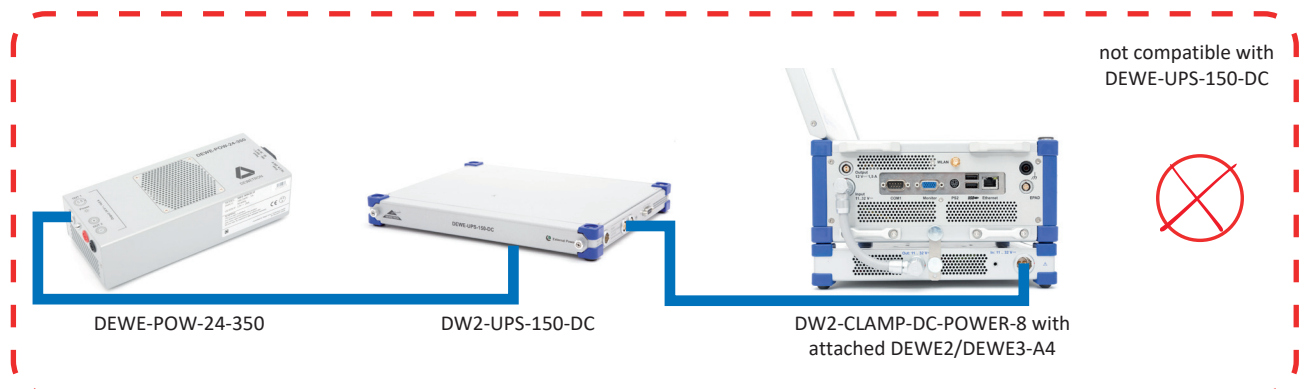
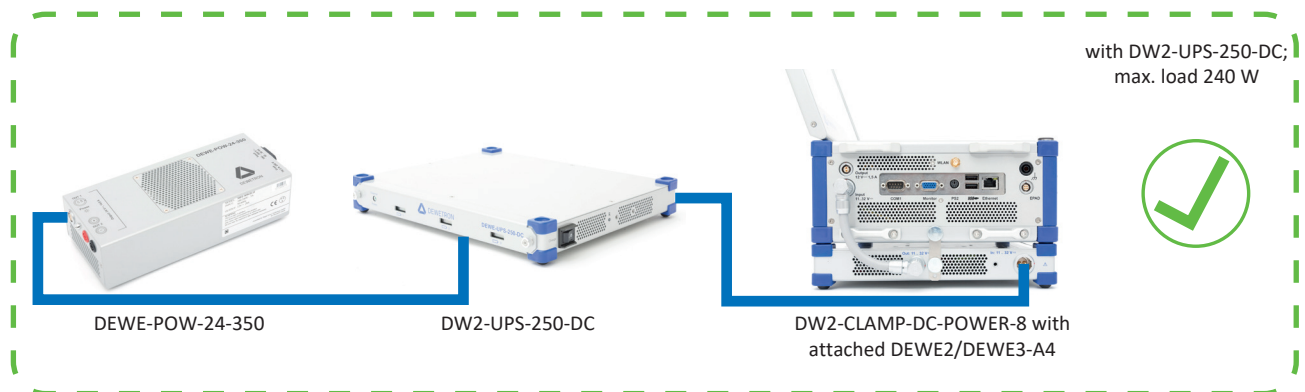
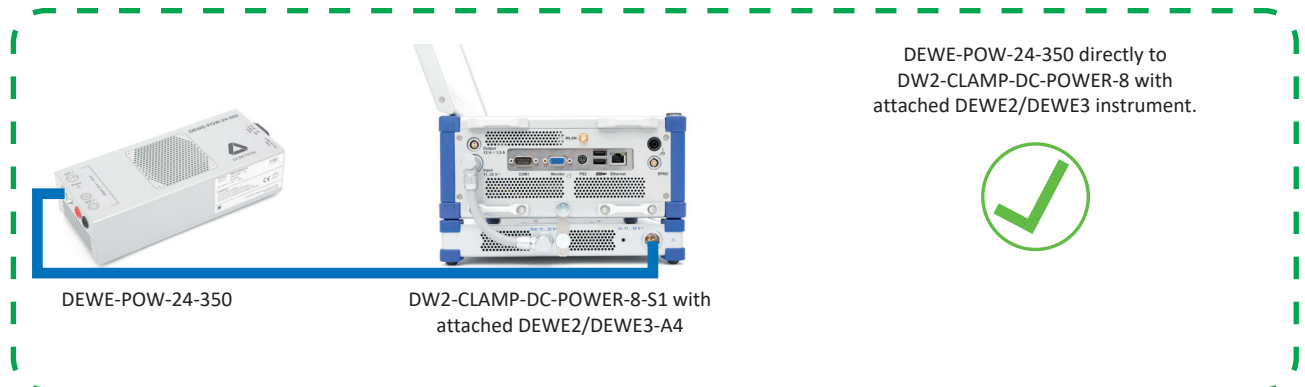
Known limitations PA-IT-1000

Due to the maximum aggregated output current of 5 A, not more than 4x PA-IT-1000 can be supplied in the absolute worst case due to the concurrency factor of the applied power system.

The following applications can be met (selection) with nominal current due to a concurrency factor less than one:

- > 4x 1-phase DC systems (4x PA-IT-1000 transducers)
- > 4x 2-phase DC systems (8x PA-IT-1000 transducers)
- > 2x 3-phase AC systems + 1x 1-phase DC system (7x PA-IT-1000 transducers)
- > 1x 6-phase AC system + 1x 1-phase DC system (7x PA-IT-1000 transducers)

Modes of operation



▼ MAIN SYSTEM

Maintenance

Cleaning:

Clean surface of the chassis with dry lint-free cloth.

Use a dry velocity stream of air to clean the chassis interior.



- Disconnect all cables before servicing the unit!
- Many components within the chassis are sensitive to static discharge damage. Always wear a ground wrist strap and service the unit only in static-free environment.
- Do not use harsh chemical cleaning agents!

CE-Certificate of Conformity



Manufacturer:

DEWETRON GmbH

Address:

**Parking 4
8074 Grambach, Austria**

Tel.: +43 316 3070 0

Fax: +43 316 3070 90

e-mail: sales@dewetron.com

http://www.dewetron.com

Name of product:

DW2-CLAMP-DC-POWER-8

Kind of product:

Box for connecting current clamps and transducers

The product meets the regulations of the following EC-directives:

2014/35/EU

"Directive of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits"

2014/30/EU

"Directive of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility (recast)"

The accordance is proved by the observance of the following standards:

L V E M C	Safety	IEC 61010-1:2011	
	Emissions	EN 61000-6-4	EN 55011 Class B
	Immunity	EN 61000-6-2	Group standard

Graz, January 25, 2018

Place / Date of the CE-marking

Ing. Thomas Propst / Manager Total Quality

▼
NOTES
