

DEWE-510

- Portable instrument
- Mixture of isolated DAQP and differential MDAQ analog inputs possible
- Up to 6 CAN bus interfaces
- Fully battery powered (optional)
- Use with laptop over Ethernet or connect external display



Choose from three models

Add your choice of signal conditioning, A/D board(s) and software to complete these systems



DEWE-510 series			
Input specifications	DEWE-510	DEWE-511	DEWE-512
Slots for DAQ or PAD modules	16	-	16
MDAQ input channels	-	Up to 64	Up to 32 (BNC only)
Main system ¹⁾			
Total PCI-slots	3 half length		
Hard disk	1000 GB		
Data throughput	Typ. 70 MB/s ²⁾		
Power supply	95 to 260 V _{AC}		
Display	No integrated display, external MOB-DISP-12-A recommended		
Processor	Intel® Core™2 Duo 2 GHz		
RAM	2 GB		
Ethernet	10/100/1000 BaseT		
USB interfaces	4		
RS-232 interface	1		
Operating system	Microsoft® WINDOWS® 7		
Dimensions (W x D x H)	439 x 308 x 181 mm (17.3 x 12.1 x 7.1 in.)		
Weight	Typ. 8 kg (17.6 lb.)		
Environmental specifications			
Operating temperature	0 to +50 °C, down to -20 °C with prewarmed unit		
Storage temperature	-20 to +70 °C		
Humidity	10 to 80 % non cond., 5 to 95 % rel. humidity		
Vibration ³⁾	EN 60068-2-6, EN 60721-3-2 class 2M2		
Shock ³⁾	EN 60068-2-27		

¹⁾ Please find current specifications in latest price list
²⁾ Data throughput depends on system configuration
³⁾ Tested with Solid State Disk

Additional interfaces and sensors

Measurements are not limited to just classic analog and digital signals. Please find further detailed information to expand your system in the chapter "Components".

Needed to complete the system

DEWE-ORION "A/D Boards" offer simultaneous sampled analog inputs, synchronous digital I/Os, high-performance counters and high-speed CAN interfaces. DAQP- or MDAQ signal amplifiers and software are needed as well.

Options to expand the system

Add further "Interface Cards" like ARINC-429, 1553, PCM telemetry, FireWire and analog output or special "Sensors" like synchronized Video, industrial encoders (RIE-360) or GPS.



A/D card



DAQP/MDAQ



DEWESoft



DEWE-30



VIDEO



VGPS



DEWE-510

DEWE-510

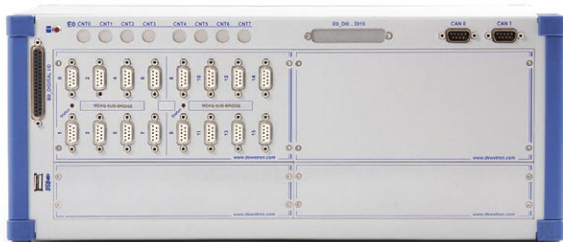
Most flexible model, prepared for DAQP **isolated** analog input amplifier modules. DAQP conditioners offer highest bandwidth, great accuracy, different input ranges and integrated filters. Besides the single channel modularity – a module easily can be changed by the user at any time – the main advantage of these modules is the high galvanic isolation which ensures safe measurements, high quality results and make them almost indestructible. See chapter "Signal Conditioning" for details.

Max. channel count	ANALOG	16 DAQ modules
	DIGITAL	I/O card & counter & CAN

DEWE-511

There are two versions, DEWE-511-A and DEWE-511-B. Both are for sensor input via differential MDAQ analog input amplifiers. MDAQ modules are available in cost efficient and space saving 8-channel blocks. See chapter "Signal Conditioning" for details.

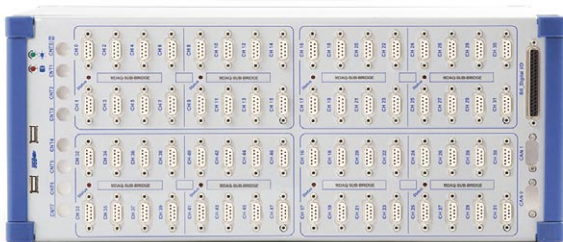
Max. channel count	ANALOG	64 MDAQ channels
	DIGITAL	I/O card & counter & CAN



DEWE-511-A

DEWE-511-A has a modular front panel and accepts

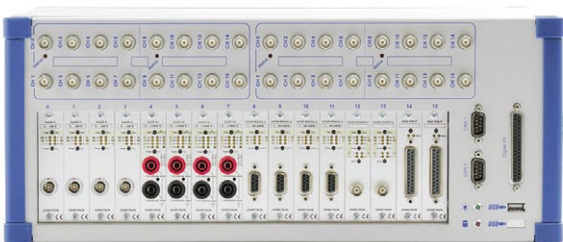
- up to 8 MDAQ-SUB-x-BNC modules
- 1 MDAQ-SUB-x-D and up to 5 MDAQ-SUB-x-BNC modules
- 2 MDAQ-SUB-x-D and up to 4 MDAQ-SUB-x-BNC modules
- 3 MDAQ-SUB-x-D and 1 MDAQ-SUB-x-BNC module
- up to 4 MDAQ-SUB-x-D modules



DEWE-511-B

DEWE-511-B has a fixed front panel and is prepared for

- up to 8 MDAQ-SUB-x-D modules



DEWE-512

DEWE-512

This version combines 16 slots for **isolated** DAQP modules and 2 positions for differential MDAQ blocks. Thus it enables you configuring a cost optimized system that needs isolated inputs, e.g. high voltage signals, and a number of differential inputs, e.g. accelerometers.

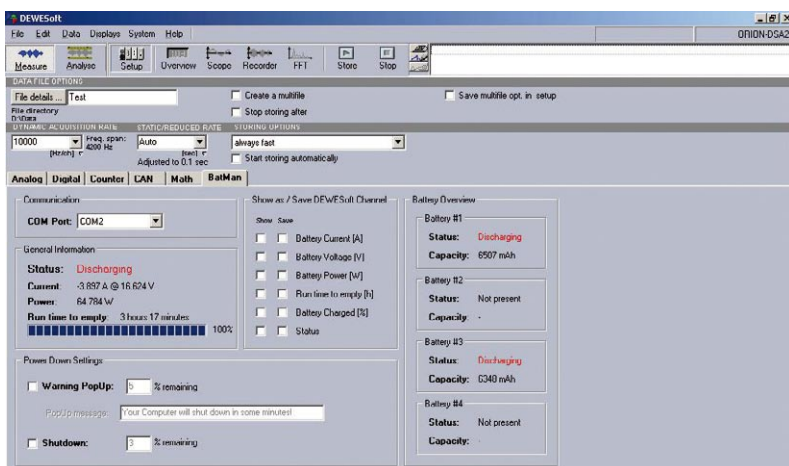
Note that only MDAQ-SUB-x-BNC fit into this model due to limited space of 1.5U.

Max. channel count	ANALOG	32 MDAQ ch & 16 DAQ m.
	DIGITAL	I/O card & counter & CAN

System options and upgrades for DEWE-510 series	
Options	Description
510-PS-BAT	Battery power supply with UPS function, 18 .. 24 V _{DC} non-isolated input, incl. external AC adaptor, 3 slots for hot-swappable batteries, 3 batteries for appr. 3 hours operation included, for DC operation always add DEWE-DCDC-24-300-ISO
DEWE-DCDC-24-300-ISO	External DC/DC converter with isolation, 9 to 36 V _{DC} input range, Lemo EGJ.3B.302, incl. 2 m cable to banana jacks, 24 V _{DC} output, 300 W, Lemo EGG.2B.302 socket
BAT-CHARGER-1	Desktop battery charger for 1 battery, incl. external AC adaptor
PS-BAT-REMOTE-ON	Special add-on for the battery power supply, one extra connection with a wake-up signal is needed to the power supply input of the unit, allows to automatically turn on the instrument when the ignition of the car is turned on, also turns off the instrument when the car is turned off
510-DC-12V	Power supply 9 to 18 V _{DC} (no internal battery), max. output 300 W, Lemo EGJ.3B.302 for DC input, incl. external AC adaptor
510-DC-24V	Power supply 18 to 36 V _{DC} (no internal battery), max. output 300 W, Lemo EGJ.2B.302 for DC input, incl. external AC adaptor
Upgrades	Description
RAM-2048-3072	Upgrade from 2 GB to 3 GB RAM (total)
HDD-250-1000	Upgrade to 1 TB hard disk (replaces 250 GB hard disk)
HDD-250-SSD-128	Upgrade to 128 GB flash disk (replaces 250 GB hard disk), max. data throughput 40 MB/s

Option 510-PS-BAT

Option 510-PS-BAT turns the DEWE-510 series unit into a fully battery powered instrument. The hot-swappable batteries guarantee continuous operation without an external power source. The instrument provides 3 slots for BAT-95WH batteries and can be operated for up to ~2 hours with 2 batteries installed. Since this time depends a lot on the system configuration a DEWESoft plugin shows the battery status directly in the software. Also alarm conditions can be set and the battery parameters can be displayed as additional measurement channels.



Left picture: Screenshot of DEWESoft battery monitor function



128 GB Solid State disk
Option for highest reliability



1 TB hard disk
Convenient for many recordings



DEWE-DCDC-24-300-ISO
Isolated DC power supply

Channel Expansion

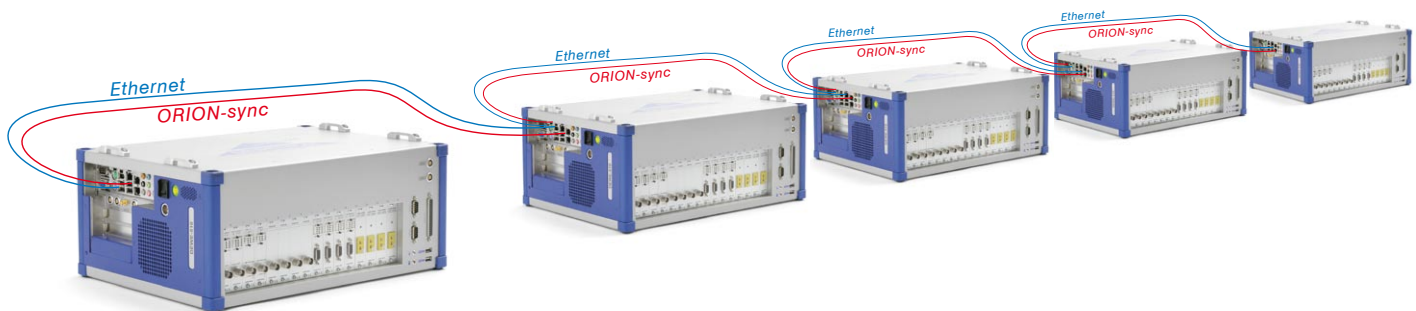
Signal conditioning for slow signals is added by connecting EPAD2 series modules to the systems EPAD interface.

For expanding the number of dynamic channels there are three choices:

Analog cable: Additional A/D boards are installed into the basic instrument and external signal conditioning, e.g. DAQ modules in a DEWE-30 chassis, is connected by means of an analog signal cable.

PCI expansion: A PCI-HOST card is installed into the basic instrument and external signal conditioning, e.g. DAQ modules in a DEWE-50 chassis, is connected by means of a PCI cable.

DEWE-NET: Several instruments are connected via Ethernet. Each unit requires an ORION-SYNC option. For short distances a sync cable is used if the units are far from each other a sync interface like IRIG-CLOCK or GPS-CLOCK is used.



Popular Accessory - MOB-DISP

It is very common to use a DEWE-510 with mobile display for in-vehicle applications, fieldwork or on test stands. There are two popular external rugged displays for the DEWE-510, a 12" version MOB-DISP-12 und a larger 15" one MOB-DISP-15. See chapter "Components" for more info.



MOB-DISP-15 in car with Autopole-1



MOB-DISP-12 with suction cups on windshield



DEWE-510 with MOB-DISP



DEWE-POWERBOX-10
DC Power distribution box



USB-PANEL-1
to display and control
DEWESoft basic functions



DEWE-DCDC-24-300-ISO
Isolated DC power supply



Optional battery charger
(range: 90 to 260 V_{AC})



The carrying bag is
included as standard
accessory