# Re-inventing Data Acquisition

## **DEWE-800**

- Test stand and laboratory instrument
- Isolated DAQP and differential MDAQ analog input versions
- Up to 6 PCI slots for A/D and other cards (1394, analog output...)
- Well suited for distributed network acquisition systems
- Safe investment, easy future upgrade



#### Choose from two models

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





DEWE-800 series		
Input specifications	DEWE-800	DEWE-801
Slots for DAQ or PAD modules	16	-
MDAQ input channels	-	Up to 64
Main system <sup>1)</sup>		
Total PCI-slots	2 full / 1 half length opt. 2 full / 4 half length	1 full / 2 half length opt. 1 full / 5 half length
Hard disk	250 GB	
Data throughput	Typ. 70 MB/s <sup>2)</sup>	
Power supply	95 to 260 V <sub>AC</sub>	
Processor	Intel® Celeron® M1.8 GHz, opt. Intel® Core™2 Duo 2 GHz	
RAM	2 GB	
Ethernet	10/100/1000 BaseT	
USB interfaces	4	
RS-232 interface	1	
Storage drive	Internal DVD +/-RW burner	
Operating system	Microsoft® WINDOWS® 7	
Dimensions	437 x 443 x 181 mm (17.2 x 17.4 x 7.1 in.)	
Weight	Typ. 12.5 kg (27.5 lb.)	Typ. 12 kg (26.4 lb.)
Environmental specifications		
Operating temperature	0 to +40 °C	
Storage temperature	-20 to +70 °C	
Humidity	10 to 80 % non cond., 5 to 95 % rel. humidity	
Vibration <sup>3)</sup>	EN 60068-2-6, EN 60721-3-2 class 2M2	
Shock <sup>3)</sup>	EN 60068-2-27	

- 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".

GPS.

#### 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.



DAQP/MDAQ





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



ARINC

VIDEO **VGPS** 



DEWE-800



DEWE-801-B1



DEWE-801-B2

#### **DEWE-800**

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-801**

There are two versions, DEWE-801-B1 and DEWE-801-B2. 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-801-B1** has a fixed front panel and is prepared for up to 8 MDAQ-SUB-x-BNC modules.

**DEWE-801-B2** has a fixed front panel and is prepared for up to 4 MDAQ-SUB-x-D modules.

Ontions	Description	
Options	Description	
800-MK	19" mounting kit for the DEWE-800 series, 4U	
800-DC-12V	Power supply 9 to 18 $V_{\rm DC}$ (no internal battery), max. output 300 W, Lemo EGJ.3B.302 for DC input, incl. external AC adaptor	
800-DC-24V	Power supply 18 to 36 $\rm V_{\rm DC}$ (no internal battery), max. output 300 W, Lemo EGJ.2B.302 for DC input, incl. external AC adaptor	
Upgrades	Description	
800-CPU-UP-C2D2.0	Upgrade of PC for DEWE-800 series consisting of mainboard with 6 PCI slots and Intel® Core2Duo processor 2 GHz	
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	
BAY-5.25-SATA	5.25" SATA removable drive bay, standard height 43.2 mm / 1.70 in., no hard disk included, max. one drive bay per unit	
HDD-3.5-SATA-1000	1000 GB SATA harddisk 3.5", for installation into a 5.25" removable drive bay	
HDD-INT-MINUS	Remove the internal fixed hard disk	

### 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.

