

# Chassis

## DEWE-30

- Stand-alone signal conditioning
- Front-ends for existing recorders, loggers, control systems, A/D cards ...
- Channel expansion for DEWETRON instruments
- $\pm 5$  V or  $\pm 10$  V output signals on multi-pin connector or BNC sockets



DEWE-30 series signal conditioning chassis are available for all DEWETRON signal conditioning modules and offer a conditioned signal output of  $\pm 5$  V or  $\pm 10$  V on BNC sockets or on a multi-pin connector when dynamic isolated HSI/DAQP or differential MDAQ signal conditioning modules are installed. The multi-pin connector can be configured to match any A/D cards interface so that a 1:1 connection of the analog signals by a high quality cable is possible.

For quasi-static PAD series isolation amplifier modules the data is output via RS-485 or RS-232. Mixed HSI/DAQP/PAD configurations are supported.



Choose from a wide range of HSI/DAQP and MDAQ amplifiers



Conditioned signal output  
 $\pm 5$  V or  $\pm 10$  V

Multi-pin socket to match  
any A/D card

Wide range AC or DC  
power supply

Many companies already have measurement devices, such as a recorder or measurement card in a PC. But it is often difficult to attach sensors. The addition of a DEWETRON signal conditioner usually simplifies sensor connection and improves the quality of the measurement data considerably. These electrically isolated amplifiers can be connected to almost any measuring system.

The electrical isolation of the signal inputs makes our HSI/DAQP amplifier modules almost indestructible, and users do not need to be specialists, or worry about details like common mode voltage, ground loops or DUT (Device Under Test) influences. Just connect the signal – be it voltage, pressure, temperature, force, distance, position, rpm, torque, resistance etc. – and measure.

**Choose from eight models**

Add your choice of signal conditioning modules to complete these systems



	DEWE-30-4	DEWE-30-8	DEWE-30-16
Slots for HSI/DAQ or PAD modules	4	8	16
MDAQ input channels	-	-	-
A/D converter	External (e.g. A/D card in computer, USB or LAN device, Recorder, Control system ...)		
A/D card configuration	SUB-D-15 socket	DEWETRON ORION series, all others optional	
Parallel outputs $\pm 5$ V <sup>1)</sup>	4x BNC	Optional	
Parallel outputs $\pm 10$ V <sup>1)</sup>	-	-	Optional
Modules control interface	RS-232 / RS-485 (optional LAN)		
Bandwidth	300 kHz	300 kHz, no bandwidth limitation with option 30-HSI	300 kHz, 1 MHz with option 30-xx-DIFF-OUT, no bandwidth limitation with option 30-HSI
Power supply (max.)	15 V <sub>DC</sub> ( $\pm 3$ %) incl. 115 / 230 V <sub>AC</sub> adaptor	85 to 264 V <sub>AC</sub>	85 to 264 V <sub>AC</sub>
Dimensions (W x D x H)	137 x 145 x 109 mm 5.4 x 5.7 x 4.3 in.	230 x 181 x 104 mm 9.1 x 7.1 x 4.1 in.	435 x 245 x 133 mm 17.1 x 9.6 x 5.2 in.
Weight	Typ. 1 kg (2 lbs)	Typ. 3 kg (7 lbs)	Typ. 4 kg (9 lbs)
<b>Environmental specifications</b>			
Operating temperature	0 to +60 °C		
Storage temperature	-20 to +70 °C		
Humidity	10 to 80 % non cond., 5 to 95 % rel. humidity		
Vibration	EN 60068-2-6, EN 60721-3-2 Class 2M2		
Shock	EN 60068-2-27		
<sup>1)</sup> These options can not be installed in one DEWE-30-xx at the same time			

<b>Options</b>			
30-HANDLE Carrying handle for DEWE-30 series	-	✓	✓
30-xx-OUT-5 BNC connectors for $\pm 5$ V output of conditioned signals	4x BNC standard	✓	✓
30-xx-OUT-10 BNC connectors for $\pm 10$ V output of conditioned signals	-	-	✓
30-xx-DIFF-OUT BNC connectors for balanced differential output	-	-	✓
30-HSI Ready for HSI modules, eliminates the bandwidth limitation of 300 kHz <sup>2)</sup>	-	✓	✓
30-xx-DC DC power supply 9 to 36 V	✓	✓	✓
DEWE-POW-24-350 External power supply for 30-xx-DC option, 95 to 260 V <sub>AC</sub> Input, 24 V <sub>DC</sub> output	-	✓	✓
30-DIO-DE 37-pin Sub-d socket on the backpanel for accessing the digital I/O lines of a DEWETRON ORION-series card	-	✓	✓
30-NI Configuration of DEWE-30-xx for NI PCI-622x / PCI 625x series cards	-	✓	✓
30-DIO-NI 37-pin Sub-d socket on the backpanel for accessing the digital I/O lines of a NI PCI-622x or PCI-625x series card	-	✓	✓
30-SPEC Configuration of DEWE-30-xx for all A/D cards other than standard	-	✓	✓
DAQP-CFB-SYNC Synchronizing of DAQP-CFB modules with more than one DEWE-30	-	✓	✓
30-x-CABLE Connection cable to A/D card	✓	✓	✓
30-xx-MK 19" rack-mount-kit,	-	-	✓ 30-16-MK, 3 U high
30-CONFIG-LAN for configuring DAQ, HSI and PAD-modules	-	✓	✓

<sup>2)</sup> Information regarding bandwidth limitation see chapter "option 30-HSI".



DEWE-30-32	DEWE-31-16	DEWE-31-32
32	-	-
-	Up to 16	Up to 32
External (e.g. A/D card in computer, USB or LAN device, Recorder, Control system ...)		
DEWETRON ORION series, all others optional	DEWETRON ORION series	
Optional	-	Optional
Optional	-	Optional
RS-232 / RS-485 (optional LAN)	RS-485 over DEWE-ORION card	
300 kHz, 1 MHz with option 30-xx-DIFF-OUT, no bandwidth limitation with option 30-HSI	Depending on used MDAQ modules	
85 to 264 V <sub>AC</sub>	10 to 36 V <sub>DC</sub>	85 to 264 V <sub>AC</sub>
435 x 245 x 223 mm 17.1 x 9.6 x 8.8 in.	208 x 95 x 108 mm (8.2 x 3.7 x 4.3 in.)	435 x 133 x 245 mm (17.1 x 5.2 x 9.6 in.)
Typ. 7 kg (15 lbs)	Typ. 1.6 kg (3.5 lbs)	Typ. 4 kg (9 lbs)
0 to +60 °C		
-20 to +70 °C		
10 to 80 % non cond., 5 to 95 % rel. humidity		
EN 60068-2-6, EN 60721-3-2 Class 2M2		
EN 60068-2-27		

✓	-	✓
✓	-	✓ Depending on MDAQ-BASE
✓	-	✓ Depending on MDAQ-BASE
✓	-	-
✓	-	-
✓	10 to 36 V <sub>DC</sub> standard	✓
✓	-	✓
✓	-	✓
✓	-	-
✓	-	-
✓	-	-
✓	1 m cable to DEWE-ORION card included	1 m cable to DEWE-ORION card included
✓ 30-32-MK, 5 U high	-	✓ 30-16-MK, 3 U high
-	-	-

NEW

DEWE2

Dedicated Instruments

Instruments

Front-ends

Signal Conditioning

Components

Software

## Option 30-HSI:

If option 30-HSI is installed, the cable length of the analog output cable is limited to 4 m and the following modules are not supported:

DAQP-CHARGE-A, DAQP-FREQ-A

Already phased out models which are also not supported if 30-HSI option is installed:

DAQN-THERM, DAQN-RTD, DAQN-OHM, DAQN-POT, DAQN-BRIDGE, DAQP-BRIDGE-B, DAQP-V-B-x, DAQP-V-A-x, DAQP-TRQ, DAQP- $\mu$ V.

## There are three major Applications for DEWE-30 Series:

- Dynamic signal conditioning front-end
- Dynamic channel expansion of DEWETRON instruments
- Quasi-static multi-channel data acquisition

### Dynamic Signal Conditioning Front-end



Signal connection to HSI/DAQP modules



Conditioned signal output  $\pm 5$  V or  $\pm 10$  V to an A/D card, control or SPC

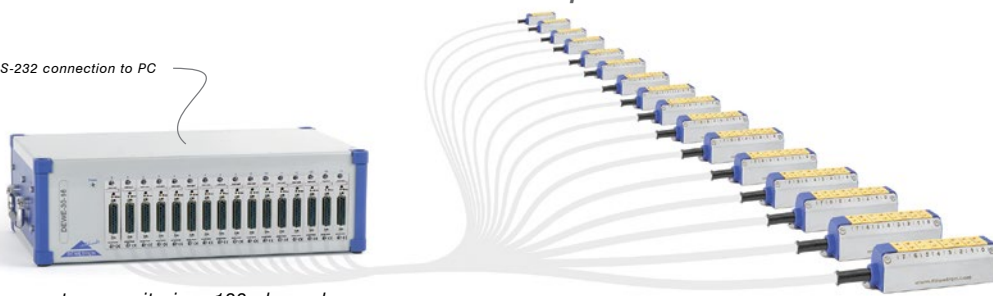
### Dynamic Channel Expansion of DEWETRON Instruments



Extra 32 channel signal conditioning to expand a 16 channel instrument to a total of 48 channels

### Quasi-static Multi-channel Data Acquisition

RS-232 connection to PC



Slow temperature monitoring; 128 channels

DEWETRON GmbH • Parking 4 • 8074 Grambach • AUSTRIA • Tel: 0043 316 30700 • Fax: 0043 316 3070 90 • info@dewetron.com

