

DEWE-GPS-CLOCK

- Highest precision
- Synchronized measurements on decentralized solutions
- Continuous synchronization to absolute GPS time
- High stable clock output even when satellite connection is broken
- Fully software controlled



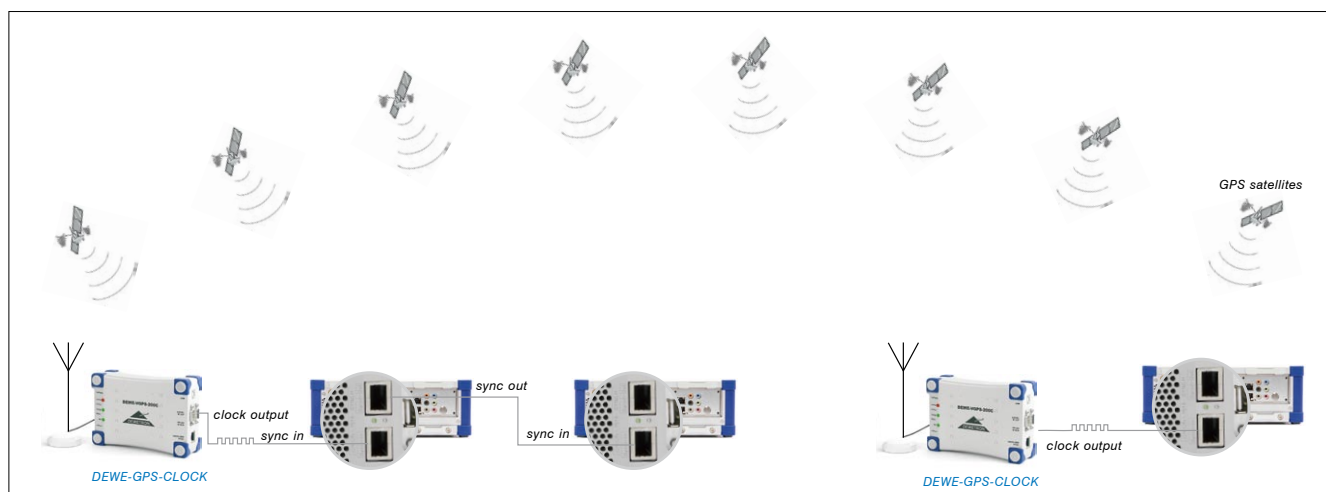
With this clock generator, DEWETRON provides fully synchronized data acquisition on decentralized solutions. Wherever your data acquisition is located - the distance can be more than 500 kilometers - the data can be acquired fully synchronized.

The DEWE-GPS-CLOCK synchronizes continuously to the absolute GPS time of available satellites. If the GPS receiver cannot detect any no satellites, the DEWE-GPS-CLOCK still delivers a high stable clock output signal.

DEWETRON offers also the remote control software DEWESoft to control the clock speed (via RS-232) for several data acquisition systems, acquire the data and finally analyze them.

DEWE-GPS-CLOCK	
Input	Standard GPS receiver (NMEA compatible) GPS antenna with 5 m cable and mounting hardware included
Output	Clock and trigger signal for A/D cards
Programming	
Interface	RS-232
Control software	DEWESoft
Synchronization	Continuous synchronization to absolute GPS time
Required number of satellites	
at start of synchronization	3 satellites required to start synchronization
during acquisition	no satellite connection required (3 satellites recommended for higher accuracy)
Pulse / sec. Accuracy with NMEA compatible GPS	5 μ s
Dimensions	165 x 115 x 50 mm (6.5 x 4.5 x 2 in.)
Weight	Typ. 700 g (1.54 lbs)

Application



Synchronization of multiple DEWETRON instruments over long distances

DEWE-IRIG-CLOCK

- Absolute time accurate synchronisation of data acquisition systems
- Continuous synchronization to IRIG time
- Output clock rate of up to 10 MHz
- Synchronization of any DEWETRON system
- Absolute long time stable
- High stability without IRIG signal
- External and internal version available



DEWE-IRIG-CLOCK	
Timing specifications	
Adjustment range	±150 ppm
Clock acc. IRIG locked	without drift
Clock acc. IRIG unlocked	< 1 ppm
System specifications	
Input	IRIG code A or B; AM or DC
AM code	0.5 Vp-p to 10 Vp-p
Ratio (AM)	3:1 ±10 %
Impedance	20 kΩ
Compatibility	DC Level Shift TTL / CMOS Compatible
Connector	BNC female
Output	Clock and Trigger for DAQ-systems
Trigger	PPS (p ulse p er s econd), rising edge on time, 75 msec high time, TTL level compatible
Scan clock	10 Hz to 10 MHz, rising edge synchronized, 50 % duty cycle, TTL level compatible
ORION-1624-SYNC	LVDS compatible synchronisation bus for ORION-xx24 series
Power supply	USB powered, max. current 250 mA
Operation temperature	-5 °C to +70 °C
Storage temperature	-20 °C to +85 °C
Humidity	10 % to 80 %; non condensing
Vibration test	EN 600068-2-6
Shape	Sine
Frequency	10 Hz to 150 Hz
Power spectral density	1 m/s ² / Hz from 10 – 200 Hz
Duration	30 Minutes per axis
Vibration test	EN 60721-3-2 Class 2M2
Shape	Random
Frequency range	10 - 200 Hz
Power spectral density	1 m/s ² / Hz from 10 – 200 Hz
Duration	30 Minutes per axis
Shock	EN 60068-2-27
Shape	Half-sine
Acceleration amplitude	15 g
Duration	11 ms
Test in 3 axis, 3 shocks in each axis and direction	
Dimensions	140 x 95 x 35 mm (5.5 x 3.7 x 1.3 in.)
Weight	740 g (1.63 lbs)

Application

Synchronization of two instruments to IRIG timecode

