

DEWE-1201

DEWETRON presents the **DEWE-1201**; a fast, sturdy yet small, **all-in-one precision measurement system**. This system's special features consist of the multi-functional analog inputs, capable counters, flexible yet user-friendly software, as well as the compact, robust manufacture.



The **16 internal analog inputs** can directly measure voltages up to $\pm 10V$, strain gauge and bridge sensors, while offering **programmable sensor supply** for every channel. **TEDS** is supported, so the connection of modern sensors is especially simple and potential user errors, such as with scaling, are systematically eliminated. For maximum flexibility, every analog input can also be configured by means of **MSI** ([Modular Smart Interface](#), also a DEWETRON development) for the measurement of ICP acceleration sensors, charges, voltages up to 200V, thermocouples or Pt100.



The miniature electronics of every MSI contain, amongst other things, an EEPROM, in which the identification and calibration data of the MSI is saved. Both are **imported automatically by the DEWESoft software** and flow into the measurement setup. Each of the 16 analog inputs can be acquired variably from 1 to 500 kS/s with a resolution of 16 Bit or from 1 to 100 kS/s with a resolution of 22 Bit. For **DSA applications** (Dynamic Signal Analyzer) DEWETRON also offers an A/D-card with 24 bit resolution and 200 kS/s, with more than 110 dB of dynamics.

In all configurations, each analog input has its **own A/D converter**, which ensures absolute **simultaneously sampling**. In addition to the analog channels, DEWE-1201 offers **up to 10 counter inputs**. Thanks to special DEWETRON technology, they are acquired absolutely synchronously in addition to the analog channels.

The connectivity possibilities are complimented through digital inputs / outputs, 2 CAN bus interfaces, and the ability to simultaneously record video and GPS data in sync. DEWETRON calls the synchronous acquisition of such different types of signals '**multi-domain ability**', as this enables the utilization of these systems in many various applications.

In order to keep up with such a multitude of applications, the software has to be appropriately powerful and modular. Next to the **synchronous acquisition** of various signal sources, DEWESoft's focus is on the ease of use, so that all users can record and analyze their data quickly and easily.

DEWE-1201 is ideally suited to stationary as well as mobile applications thanks to small dimensions of **317 x 252 x 110 mm (12.48" x 10" x 4.33")** and a weight of only roughly **5.5 kg (12 lbs)**.

Notable possible applications: countless in-vehicle tests (break tests, driving dynamics, ACC...), mobile shock and vibration tests, numerous industrial applications (balancing, rotational and torsional analysis...), recorder, high speed data logger, etc.