

2-channel oscilloscope

Art.-No. W070 500 020



This digital 2-channel oscilloscope specially developed for use in the automotive sector is used to measure signals or variables on electrical components in motor vehicles.

It shows you what's really happening inside a vehicle.

Equipment features

Wide range of measurement of voltage, current, frequency, duty factor, e.g.:

- Actuators – injection nozzles, injectors, EGR valves
- Ignition systems (conventional & distributorless) – primary + secondary sides
- Starter and charging circuit measurements – without removal of components
- Sensors – ABS, crankshaft, camshaft, intake manifold pressure, knock sensor, Hall-effect sensor, air-mass meter, lambda sensors
- Relative compression check – without removal of components
- **NEW:** Bigger clip-on current probe for current measurement up to 600 A
- Measurement of high-speed signals possible (e.g. CAN bus, MOST bus, LIN bus systems)
NEW: now measurement on Flex-Ray Bus possible
- **NEW:** Incl. Ignition coil test rod allows a direct measurement of the secondary ignition voltage at the single spark coil test cables or coil on plugs without removing the coil, incl. connecting cable
- **NEW:** Incl. fuse test adapter set for current measurement directly at the fuse plug-in slot

Simple functions

- Saving and printing of the display or measurement.
NEW: larger memory
- Simple online updating – lifelong guarantee
- Colour guidance system for improved allocation of cables for mixup-free measurement

Extensive automotive engineering menu for simple, fast measurement. Comprises the following components:

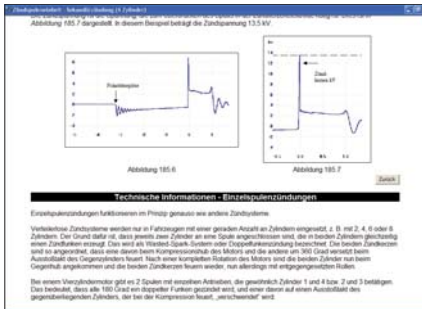
- Reference diagram of the measured component
- Technical information on the component
- Detailed connection help
- Automatic setting of the correct measurement range

This special features saves time and helps you to concentrate on the essentials.

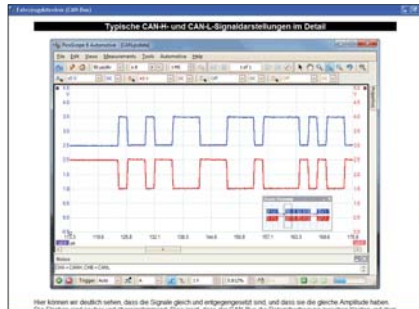
| Technical data | |
|-----------------------|--|
| Number of channels | 2 |
| Frequency range | 20 MHz DC |
| Scanning frequency | NEW: 400 MS/s |
| Resolution | 12 bits |
| Measurement ranges | ± 20 mV to 50 V |
| Test range | 5 ns/div to 5.000 s/div |
| Number of time ranges | 25 |
| Measuring mode | AC / DC |
| Trigger mode | Auto / Normal / Einzeln |
| Power supply | via USB |
| Interface | NEW: USB 3.0 (USB 2.0 compatible) |
| Approvals | CE / VDD / LVD WEEE etc. |
| Input resistance | 1 MΩ |

Scope of delivery

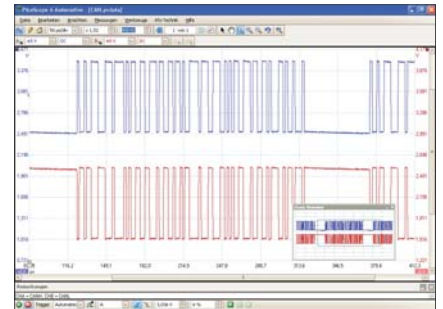
| Designation |
|--|
| 60 A DC clip-on current probe |
| 600 A DC clip-on current probe |
| 20:1 divider / attenuator (2 pcs.) |
| BNC test cable (4 mm) 3 m long (2 pcs.) |
| Secondary ignition alligator clip with cable (2 pcs.) |
| 2-pin Y-cable with connector |
| Multimeter test prod red/black |
| Small crocodile clip red/black |
| Large dolphin clip red/black |
| Connector acupuncture set |
| Acupuncture clip red/black |
| S-hook |
| Windows installation CD (Windows 7 / 8.1 / Vista) |
| Workshop case with instructions |
| USB cable |
| NEW: Ignition coil test rod |
| NEW: Fuse test adapter set for current measurement (1x small fuse, 1x large fuse) |



Technical information on the component







Reference diagram of the measured component



Automatically set measurement range with zoom function

Accessories

| Designation | Art.-No. | Description | Picture |
|---------------------------------------|---------------------|---|---|
| Fuse test adapter set | W071 500 001 | Allows measurement (current) directly at the fuse plug-in slot 1x small fuse, 1x large fuse |  <p>INCLUSIVE for Art.-No. W070 500 020</p> |
| Single spark coil test cable | W071 500 002 | Also suitable for ignition modules (x c(cyl.)) e.g. x4 for 4-cylinder engines, etc. incl. earth/ground cable for ignition coil |  <p>TOP ACCESSORY! For fast adaptaion.</p> |
| Ignition coil test rod | W071 500 003 | Allows measurement of the ignition voltage without removing the coil, incl. connecting cable |  <p>INCLUSIVE for Art.-No. W070 500 020</p> |
| Rubber-coated protective cover | W071 500 004 | Can be reordered for Art.-No. 0900 301 020 |  <p>INCLUSIVE for Art.-No. W070 500 020</p> |

4-channel oscilloscope

Art.-No. **W070 500 040**

The digital 4-channel oscilloscope is used to measure up to 4 signals and variables simultaneously (e.g. 4-cylinder engine). It features the same equipment as the 2-channel oscilloscope, but also contains:

- Small crocodile clip red/black (1 pc.)
- 20:1 divider/attenuator (2 pcs.)
- Secondary ignition alligator clip with cable (2 pcs.)
- BNC test cable (4 mm) (2 pcs.)
- Multimeter test prod red/black (1 pc.)