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CAN-Bus Tester 2

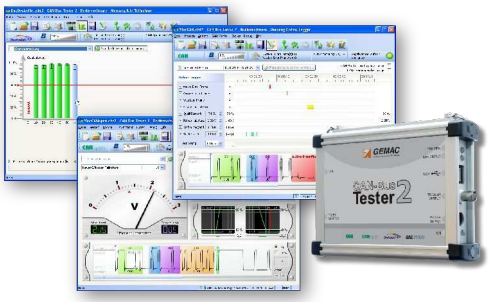
Features:

- Bus systems:
  - CAN, CANopen, DeviceNet, SAE J1939
- Baud rates (5 kbit/s ... 1 Mbit/s)
- Measuring of the signal conditions:
  - General quality level (0 ... 100 %)
  - Disturbance-free voltage range, rising and falling edges
- Continuous monitoring
  - Bus status, bus traffic load, error frame counter
- Online trigger (real-time monitoring of the bus for logical and physical errors)
- User-friendly protocol monitor (CAN, CANopen)
- Testing of cables (Short-circuits, interruptions, loop resistances, cable length)
- Straightforward application software:
  - Management of measurements (measurement types, measuring points, measuring times)
  - Comprehensive test record, broad variety of export functions

The CAN-Bus Tester 2 constitutes a universal measuring instrument for the commissioning, analysis, monitoring, troubleshooting and service/maintenance of CAN bus plants.

Typical problems which occur during the operation of CAN bus plants, such as node failures, faults in the communication or complete standstill of the plant, often have their origins in the physical bus characteristics. The CAN-Bus Tester 2 provides an overview of the signal conditions on the bus, which helps you locate and rectify frequently occurring error causes without unnecessary delay.

You can already ensure a correct bus cabling and verify its transmission properties when setting up the plant. You can also perform comparing measurements directly on the running plant over its lifetime and thus prevent down-times.



Fields of application:

- Commissioning of CAN bus plants
- Wiring test, module check
- Service/maintenance of CAN bus plants
- Troubleshooting and analysis of the physical bus characteristics
- Development of CAN modules
- Final testing in the production

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Technical Specifications*:

General parameters and overview of functions	
Use (CAN type)	CAN (ISO11898-2), CANopen (CiA301), DeviceNet (EN 50325-2), SAE J1939
Baud rates	All baud rates according to the particular CAN type; customized baud rates
Quality level	Signal quality level (0 ... 100 %)
Disturbance-free voltage range and edges	0 ... 4 V, resolution 50 mV, edge steepness (in 1/64th of the bit width)
Oscilloscope with message frame analysis	64-fold sampling per bit, 10,240 sample points, zooming, adjustable trigger position, recording of complete message frames, decoding to used protocol
Bus status	Bus traffic detection (display: dominant, recessive, not defined, bus traffic)
Bus traffic load	Permanent display of the bus traffic load (0 ... 100 %),
Protokollmonitor	CAN: Reception of CAN message frames incl. filtering, Transmission of CAN message frames and sequences (message lists) CANopen: Interpretation of all CAN messages according to the CANopen spec as SDOs, PDOs, NMT-, Heartbeat-, Emergency-, Sync- and Timestamp (CiA301, CiA302, CiA305, CiA401, CiA402, CiA404, CiA406, CiA408, CiA410, upgradeable)
Electrical parameters	
Power supply	Via the supplied wide-range power supply pack (9 ... 36 V DC)
Measuring of the differential voltage Measuring of the loop resistances Measuring of the cable length	typ. -0.75 V ... 3.00 V typ. 0 Ω ... 800 Ω typ. 0 m ... 500 m
Measuring of the CAN supply voltage	0 ... 36 V
Mechanical parameters	
CAN connection	2 x 9-pin D-Sub 9 connectors
PC connection	Self-powered device to USB Specification 1.1, electrically isolated
Trigger output for the oscilloscope	BNC socket, electrically isolated
Housing	Aluminum plate housing, degree of protection: IP20
Temperature range	Operation: 5 ... 40 °C, storage: -20 ... 60 °C
Dimensions (Device / Case)	170 mm x 134 mm x 40 mm / 504 mm x 354 mm x 119 mm
Weight (Device / Case)	Approx. 600 g / Approx. 5000 g

* For a complete description of all technical specifications, please refer to the User Manual (www.gemac-chemnitz.de).

Ordering Information:

Product	Description	Article number
CAN-Bus Tester 2	CAN-Bus Tester 2, basic version, bus system: CAN	PR-22517-10
Bus system: CANopen	License key for bus system CANopen	SW-22517-01
Bus system: DeviceNet	License key for bus system DeviceNet	SW-22517-02
Bus system: SAE J1939	License key for bus system SAE J1939	SW-22517-03
CAN monitor (transmit / receive)	License key for CAN monitor (transmit / receive)	SW-22517-10
CANopen monitor (receive)	License key for CANopen monitor (receive)	SW-22517-11