

LTC-802 M-Performance LEAK-TEST-COMPUTER

LEAK TEST COMPUTER FOR
LEAKAGE TESTING WITH
MASS FLOW PERFORMANCE
METHOD



The LTC-802 M-Performance offers a high-precision leak testing solution based on the mass flow method in a compact package that can be implemented without a reference volume. The improved design allows for shorter cycle times and reduces the time required to calibrate components.

Although the LTC-802 M-Performance's measurement setup operates without a reference volume, the latest sensor and controller technology allows the smallest leak rates to be determined with high precision. The intuitive and proven operating concept of the LTC-802 series is retained in the LTC-802 M-Performance. The internal design has been developed for testing large volume components in the automotive and transportation industries. All components used are selected and carefully tested for high output industrial environments. The proven communication interfaces of the LTC-802 series are also available.

Highlights

- Mass Flow Performance Method
- Direct determination of the leakage rate
- Tolerant to volume changes of the test part
- No reference volume needed
- Reduction of compressed air consumption
- Increase in output of up to 20%
- User-friendly operating concept
- innomatec special software modules
- RS232, PROFINET, PROFIBUS, EtherNet/IP™, EtherCAT, OPC UA, USB 3.0, HDMI

Fields of application:

- E-mobility
- Drive technologies
- Energy storage
- Household goods
- Industrial products

Example products:

- Battery case
- Battery modules
- Battery Packs
- Fuel tanks
- Liquid container
- Gearbox
- Differential gear
- Air ducts
- Intake modules
- Housing

| M-Performance specifications | |
|----------------------------------|--|
| Housing dimensions | 350 mm x 170 mm x 300 mm (WxHxD) (1½x19"; 3 U) |
| Weight | 12.0 - 16.2 kg |
| Measuring channels | 1 |
| Pressure range | 0.01 - 1.8 bar (rel) |
| Flow range | 2 - 540 ml/min |
| Theoretical pressure drop | 0.3 - 99960 Pa/s |
| DUT volume | 0,01 - 200L |
| Measured variable | Mass flow performance |

The innovative operating concept of the LTC-802 series, taken to the next level in measurement technology

The M-Performance method enables direct leak rate measurement in a wide range of applications with reduced operator effort. The test pressure is kept constant in the test specimen via a high-precision pressure regulator. The air required for this is measured via a mass flow cell and thus corresponds directly to the leakage rate of the system. Due to the optimized design - using high-precision measurement technology - companies can very flexibly test not only small test specimens from 10 milliliters, but also components with very large volumes of up to 200 liters for leaks, with leak rates from two milliliters/minute.



Accessories available

- Factory or DAkkS calibrated test leak
- Adjustable leak simulator DF-10
- Barcode or DMC scanner
- Printer
- External venting
- Temperature sensor technology
- Bypass function
- Digital interfaces:
PROFINET, PROFIBUS, EtherNet/IP™, EtherCAT, OPC UA
- Sealing technology: connec® quick connector systems
- and many more

Special software solutions

- Database connection according to customer specifications
- Control of external components
- Special measurement procedures
- Standard modules:
 - innoBroadcast
 - innoExtBD
 - innoRC
 - innoReport
 - innoRM
 - innoScan
 - innoSMB
- and many more

Contact our sales department to learn more about our solutions for your leak testing requirement, as well as special solutions and accessories of the M-Performance.

Technical data:

200 TESTING PROGRAMS

- History management depth 100
- Times adjustable from 0.1 sec. to 999 sec.
- 0.1 - 999.0 sec. in 1/10 sec. steps

ADJUSTABLE AND PARAMETERIZABLE FUNCTIONS

- Program sequences
- Follow-up test
- Serial error
- Shock filling
- Automatic parameter determination
- Automatic offset compensation
- Copy functions for program parameters
- Zero point adjustment
- Bypass function
- External pressure switch query
- Programmable inputs and outputs for control of tools
- Device test (optional)
- Pressure setting
- Statistics
- Printer management
- Shift management
- LAN configuration
- WLAN configuration

DISPLAY AND OPERATION

- TFT touch screen, 7" full graphics, daylight ready

HIGH-SPEED 64BIT EMBEDDED PC

- Dual Core 64bit Embedded PC
- Cortex-M4 microcontroller 32bit
- 2.0 gigabyte RAM, 1.0 MB L2 cache
- 8.0 gigabyte SSD hard disk
- A/D converter 24bit
- Linux operating system

INTERFACES

- 1 x USB port 3.0, Super Speed (front side)
- 2 x USB port 2.0 Hi-Speed (rear)
- 1 x RS232
- 1 x Profibus or Profinet (optional)
- 1 x HDMI port
- 1 x Ethernet port
- 20 Digital inputs for external control
- 12 Digital outputs for external control

COMPRESSED AIR INTERFACES

- Supply air connection: G 1/8"; hose connection 6/4 mm Optionally other cross sections
- Test leak connection: Stäubli RBE03
- Optional other makes
- Venting: G 1/8"; via silencer

SELF-TEST FUNCTIONS

- Endurance test
- Device test (optional)
- Pressure setting

MASK REPRESENTATION

- All setpoints and actual values
- Data memory for 1,000,000 measurements
- Graphical curve progression (with zoom function)
- Statistics
- Counter
- Device temperature
- Interfaces for digital I/O
- detailed error messages

LANGUAGES

- Standard selection: German, English
- optional: Spanish, Portuguese, Chinese, Italian, Dutch, Polish, Russian, Slovak, Czech, Hungarian, Croatian, Danish, etc.

DISPLAY AND ADJUSTABLE VALUES

- Limits: ccm³/min, ml/min, l/min, l/h, mbarl/s
- Measuring results: ccm³/min, ml/min, l/min, l/h, mbarl/s
- Volume: ml, l
- All the above values are selected globally or per test program

USER MANAGEMENT

- Up to 100 users with 2 user levels and individual password

AMBIENT TEMPERATURE

- -5 °C to +45 °C (measuring capability must be proven according to application)

STORAGE TEMPERATURE

- -15 °C to +60 °C

Mains connection

- Power supply: 100 - 240 V, 47 - 63 Hz, 1.25 A

Scope of delivery

- Power cable 1.5 m with external power supply unit
- Maintenance unit with fine filter (5 µm) and water separator for supply air
- Test air line length approx. 3.0 m
- Instruction manual
- CE Declaration of Conformity according to EC Directive 2014/32/EC
- Measuring instruments Initial certification according to DIN EN ISO 9001:2008 guidelines
- Factory calibration with certificate