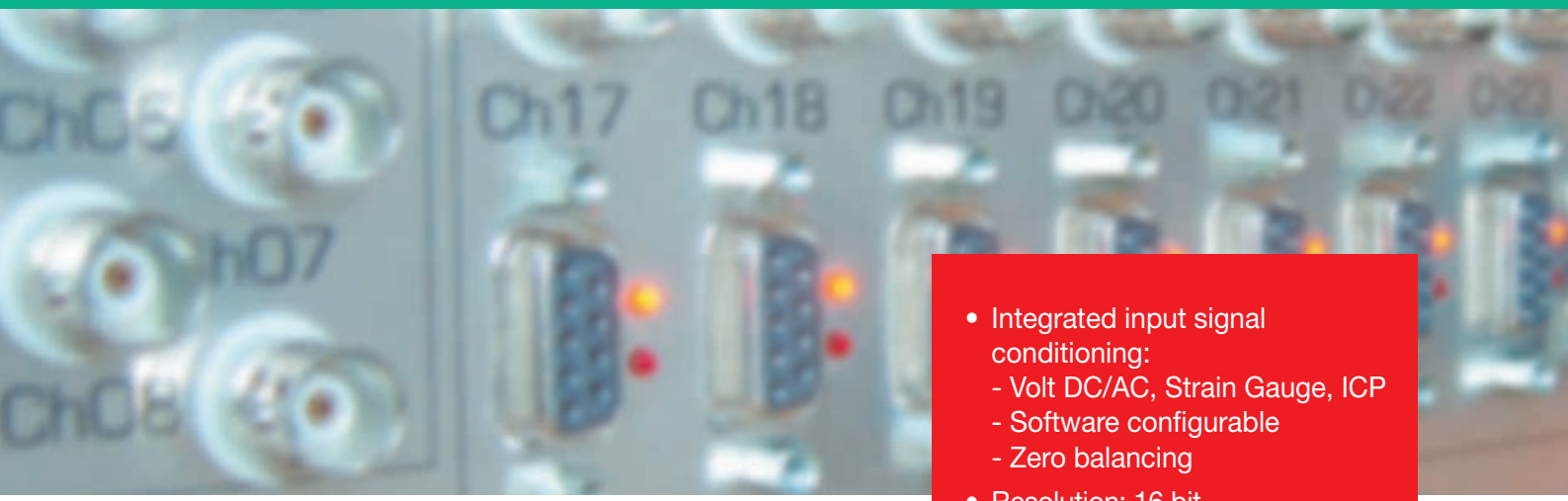
LTT SensorCorder



Strain Gauge / Volt- / ICP Measurement System

- Integrated input signal conditioning:
  - Volt DC/AC, Strain Gauge, ICP
  - Software configurable
  - Zero balancing
- Resolution: 16 bit, 500 kHz sample rate per channel
- Galvanic isolation
- Sensor power supply: Ultra-precision constant current and constant voltage
- Patented data transfer system: no device drivers
- DLL interface
- Powerful network software LTTproNet for large distributed systems
- Single-user software LTTview
- 9-18 VDC power supply
- 100-240 VAC external mains adaptor
- Front-end with 8 or 16 channels
- Cascadeable systems from 16 to 4096 channels
- 19“ rack mount version
  - 32 channels per rack

LTT

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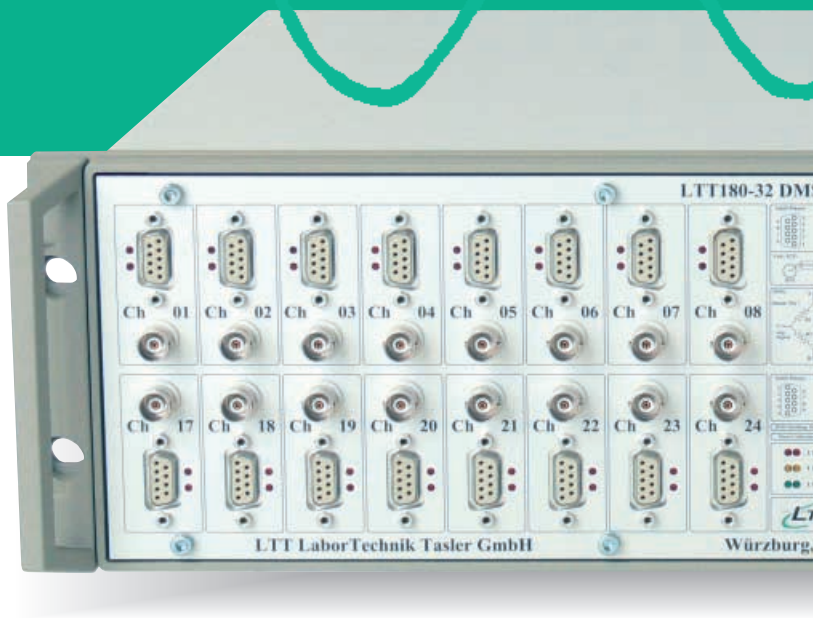
LTT SensorCorder
Hardware



All-in-one signal conditioning

LTT SensorCorder
is a mobile measurement system with 8, 16 or 32 galvanic isolated Strain Gauge, Volt and ICP inputs that can be set up separately for each sensor type using dedicated software. The inputs are measured with 16 bit resolution.

Up to 500 kHz sampling rate per channel

The maximum sample rate is 500 kHz per channel. The galvanic isolation works in the frequency range from 0 to 50 kHz. Automatic zero balancing, analogue and digital input filtering, internal shunt calibration, quarter, half and full bridge connections and AC/DC coupling complete the system.
Ultraprecision constant current and constant voltage supplies are provided for each channel. The internal memory is upgradeable from 4 MS per channel to 16 MS per channel.

Save measured data in your preferred file format

Decide if you want to save the data directly in DIAdem, Famos, MGraph or LTT format. This eliminates the need for exporting the data, so you can start analysing immediately.

Stand-alone with integrated hard disk

Optionally with integrated hard disk for measurements without PC connection. For detection of sporadic machine faults or measurements in harsh environments.

The SensorCorder LTT 180-8

PC interfacing options

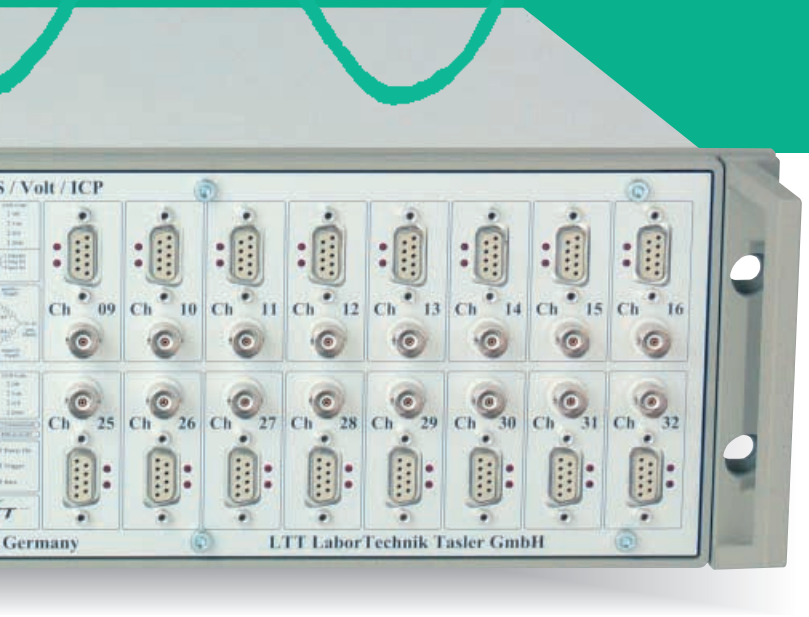
The system has been specifically developed for ultrafast long- and shortterm measurements. It communicates with a PC via Ethernet (1000/100/10 BaseT), WLAN, SCSI, USB or Fire Wire. Using the DLL you can integrate your own applications (e.g. FAMOS, LabView, DIAdem, MATLAB, MGraph).

LTT SensorCorder can be customised to your needs. The system is available

- as compact desktop version with 8 or 16 channels
- with cascaded units for multi-channel measurements
- with an optional internal hard drive (40 GB) for operation as a stand-alone data recorder
- as 19“ rack mount version in silver design (32 channels per rack), optionally with stand-alone functionality.

For higher signal bandwidths
the proven Transient Recorders LTT-184 and LTT-186 are available with sample rates up to 20 MHz. Please ask for our brochure „LTT Transient Recorder“ or visit our website www.tasler.de

LTT SensorCorder
Application Examples



Turbine test stands

Distributed measurement front-ends connected to scaleable computing power via Gigabit Ethernet. Several LTT 180 32-channel front-ends are arranged around the turbines and connected to the control room via Gigabit Ethernet.

User benefits: Short cables from sensor to front-end. Each sensor can be connected to any of 32 galvanic isolated input channels with integrated conditioning for Volt, Strain Gauge and ICP inputs. The connections of the respective sensors are software configured – no hardware modification is required. Almost any number of computers can be connected via Gigabit Ethernet to perform tasks like displaying, analysing and storing measured data.

Engine testing

LTT SensorCorder provides high sample rates for tension, strain and vibration measurements on engines performed with accelerometers.

User benefits: Compact design, easy to use with included software LTTview; fast, patented technique for data transfer from the system to a PC.

Component testing

For example on Diesel fuel injection systems (also as RPM-induced measurements).

User benefits: Flexible systems, sample rates up to 500 kHz, 16 bit resolution, cascadeable systems for multichannel measurements can be combined with the proven Transient Recorder.

Underwater sonar signals

Listen to the „silent ocean“. Noise recording, e.g. from a ship’s propeller.

User benefits: High sample rates up to 500 kHz, 16 bit resolution, mobile system, can replace tape recorders due to optional integrated hard disk!

Military

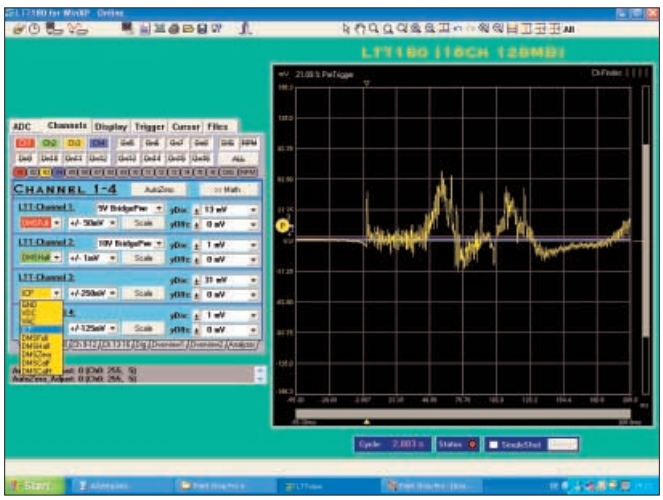
The small, rugged SensorCorder with integrated 40 GB IDE hard disk can be used for mineprotection and blast testing.

User benefits: Long-term measurements possible, including recording piezoelectric signals. LTT systems can replace tape recorders. Measured data include acceleration, temperature, torque etc.

Noise analysis

With LTT SensorCorders you can for example perform 3D analysis of noise sources on vehicles and take adequate measures.

User benefits: Array measurements on 16 (or more) synchronous channels.



User comfort with LTTview

Software for setting up the SensorCorder as well as visualising and storing measured data. Various trigger conditions and a wide range of online maths operations allow to display the data in the way you need for evaluating your measurements.

LTT References

ABB AG • Audi AG • BMW AG • Robert Bosch GmbH • Bosch Engeneering • Bosch Corporation China • Bosch Corporation Japan • Bosch Corporation USA • DaimlerChrysler AG • EADS Deutschland • EADS Frankreich • Fraunhofer Institut • Maschinenfabrik Reinhausen GmbH • Militär • Siemens AG • Siemens VDO Automotive • Siemens VDO Mechatronik • Siemens Power Generation • TU München • Volkswagen AG • u.v.a.

Fields of operation

Production and Test

- product control
- test systems for airbags
- measurement systems for motor control systems
- quality control and optimization of production processes
- turbine test stands

Research and Development

- measurements in research institutes and universities
- fracture research and modal analysis in static construction
- applications in biomedicine and neuromedicine

Mobile measurement

- long duration measurements and studies in the automotive industry
- service operations and on-site appl.
- mobile laboratory measurements
- crash-tests

About LTT

LTT is a leading manufacturer of measurement systems located in Wuerzburg, Germany. The technology is based on a patented data interface which allows extremely fast transfer rates from the measurement device to an internal hard disk or PC. LTT cooperates with selected distribution partners worldwide to ensure the best local service for its products.

Interested?

Are you interested in further details about LTT products? Please visit **www.tasler.de** or call us. Our sales team will be glad to talk to you.

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