

## LTT Transient Recorders.

Compact. Fast. Multifunctional.

- 16 bit resolution
- sampling rates  
1 kHz – 20 MHz
- external sync
- RPM input
- 8 or 16 differential  
analog inputs
- auto-zero function
- digital inputs
- patented data  
communication
- no drivers necessary
- DLL-interface
- LTTview software  
included
- 9 – 36 V DC power



# LTT-184

# Multifunctional, High Resolution Trans

At LTT, we stress high precision, quality and service. Therefore our products are implemented in a variety of demanding scenarios, e.g. industry, scientific research and development. We invite you to take a deeper look into some of our most exciting applications.

The LTT-184 series of transient recorders offers 8 or 16 differential analog channels with sample rates varying from 1kHz to 20MHz per channel. The total sampling rate of 100 MHz even allows for synchronized measurements with 16 channels at 2.5 MHz @ 16 bit.

### Applications:

- **Internal combustion engines:**

LTT systems are used in the diagnosis of motor control, spark plug voltage, etc.

**Advantages:** simultaneous measurements with 16 channels or more, triggering on missing events, 16 bit resolution.

- **Airbag Development:**

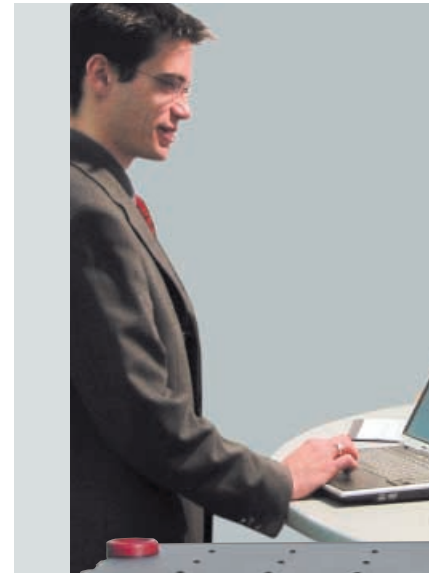
With help of LTT systems, the control signals for airbag electronics are recorded and analysed for their quality.

**Advantages:** high sampling rate (signal form and timing), large sampling depth, various trigger options, simple online mathematical operations.

- **Mechanical Engineering:**

LTT systems are helping in the construction of machinery. Both high and low frequency mechanical forces and accelerations are measured.

**Advantages:** compact mobile design, "ease of use" using the included software LTTView, multi-purpose solutions through fast, patented data communication to a PC.



LTT-19x  
LTT transient recorders are also available

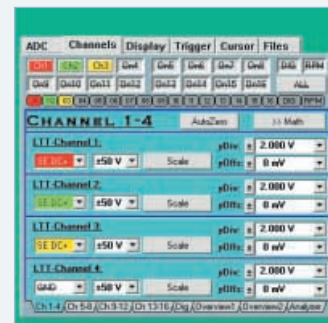
### LTTview:

The comprehensive software for configuration and analysis

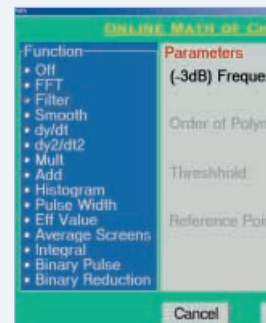
LTTview is simple to use and yet powerful software, which contains many functions to configure LTT-18x and to analyse the incoming data. The graphical user interface simplifies the use of the LTT systems. Integrated in the software, LTTview, are various export filters which save the data to common formats.



Setting the sampling rate



Activating the channels



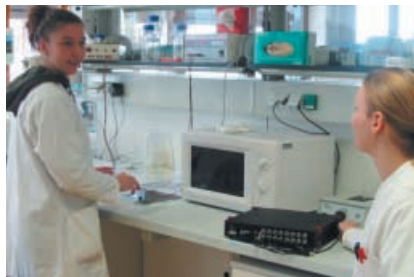
Choosing the mathematical

# Scientific Recorders and Control Systems.

**LTT-186**



Available in a 19" rack system.



● **Research centers:**

Measuring system components e.g. of satellites, and modal analysis of materials.

**Advantages:** flexibility of the system, sampling rates from 1kHz to 20 MHz, 16 bit resolution, cascadeable systems for multi-channel measurements, synchronisation of all channels, simultaneous triggering option.

● **Military:**

Experiments for mine detection measurements and explosion analysis.

**Advantages:** Long duration measurements possible where, among others, piezoelectric signals are recorded. LTT systems operate with tape, disc and solid state storage solutions. Systems allow for measurement of acceleration, temperature, force, and many more.

● **Power Train:**

Analysis of rotating systems.

**Advantages:** LTT systems are transportable, robust, and can be externally synchronised. External pulse signals can be measured with 10 ns resolution (RPM). LTTview supports common formats like: DIAdem, FAMOS, MATLAB, LabVIEW, MGraph, FlexPro etc.

In addition to the architecture of LTT-184, the serie LTT-186 offers an internal IDE harddrive with 40 GB. For exceptionally rough applications a flash disk is available. The special operating system of the LTT-186 guarantees functionality without a connection to a PC.

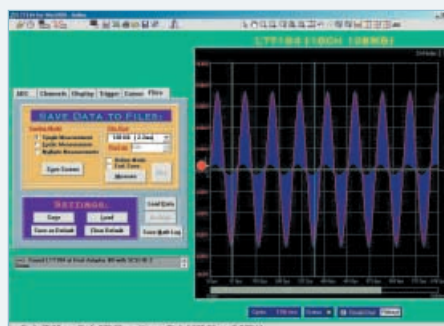
The housing is made of strong, high pressure aluminum and is optimised for rough conditions.



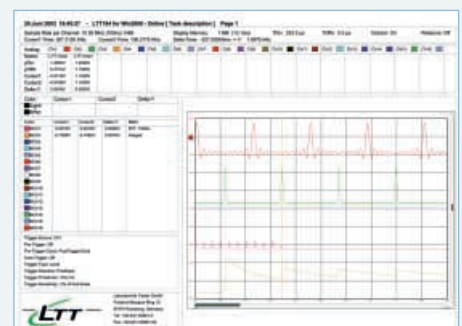
Function



Triggering options



Data observation, analysis and saving



Informative print out with measurement details

# LTT Transient Recorders. **References**

Audi AG • BMW AG • Bosch GmbH • German Army • Conti-Teves AG  
• DaimlerChrysler AG • EADS Deutschland GmbH • Linde AG •  
Maschinenfabrik Reinhausen GmbH • Siemens AG • Siemens VDO  
Automotive AG • TU München • Volkswagen AG • and others

## 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

### Research and Development

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

### Mobile measurement

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



## About LTT

LTT is a leading manufacturer of measurement systems located in Würzburg, 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](http://www.tasler.de) or call us. Our sales team will be glad to talk to you.

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