

# LTT Tasler Technical Data / Technische Daten

| LTT Tasler                           |   | Transientrecorder   |               |                |   | SensorCorder  |  |                        |            |
|--------------------------------------|---|---|---------------|----------------|---|---|--|------------------------|------------|
| LTT Tasler                           | Type  | LTT 184/8   | LTT 184/16    | LTT 186/8      | LTT 186/16  | LTT 180/8   | LTT 180/16                                 | LTT 182/8              | LTT 182/16 |
| Recording Media                      | Recording Media                                   | Memory  | Memory        | Hard Disk      | Hard Disk   | Memory  | Memory                                     | Hard Disk              | Hard Disk  |
|                                      | Media Type  | RAM   |               | RAM + HDD      |   | RAM   |  | RAM + HDD              |            |
|                                      | capacity  | 128 - 512MB   |               | 40GB           |   | 128 - 512MB   |  | 40GB                   |            |
|                                      | comment   | Also recording on hard disk drive of connected computer is possible.  |               |                |   |   |  |                        |            |
| Max. data transfer rate              | Internal RAM                                      | 200MByte/s  |               |                |   | 16MByte/s   |  |                        |            |
|                                      | Internal HDD or Tape                              | -   |               | 19.6MByte/s    |   | -   |  | 16MByte/s              |            |
|                                      | PC (with SCSI)                                    | 17MByte/s   |               |                |   | 16MByte/s   |  |                        |            |
|                                      | PC (with USB)                                     | 11MByte/s   |               |                |   | 11MByte/s   |  |                        |            |
|                                      | comment   | Transfer speed to computer hard disk depends on PC type, hard disk fragmentation, virus scanner software and ....                             |               |                |   |   |  |                        |            |
| Input characteristics                | No. Of channels                                   | 8   | 16            | 8              | 16  | 8   | 16   | 8                      | 16         |
|                                      | Max. No. of channels                              | 4096  |               |                |   | 4096  |  |                        |            |
|                                      | Max. Bandwidth                                    | DC - 6.5MHz (5ch, RAM)<br>DC - 1 MHz (3ch, HDD)<br>DC - 200kHz (16ch, HDD)  |               |                |   | DC - 100kHz (16ch, HDD)   |  |                        |            |
|                                      | Quantisation                                      | 16-bit (400Hz - 1MHz); 12-bit (1.1 - 6.5MHz)  |               |                |   | 16-bit (400Hz - 500kHz);  |  |                        |            |
|                                      | External Quantisation Clock                       | YES; (Bandwidth = Clock / 2.5)  |               |                |   | YES; (Bandwidth = Clock / 40)   |  |                        |            |
|                                      | Impedance   | 100kOhm (Optional 1MOhm, Input range 10V - 200V)  |               |                |   | 100kOhm   |  |                        |            |
|                                      | Connector   | 2x BNC per channel (single ended and differential)  |               |                |   | Sub-D 9-pin   |  |                        |            |
|                                      | Input Protection                                  | +/- 200V differential; +/- 100V single ended  |               |                |   | +/-30V  |  |                        |            |
| Direct voltage Input                 | Galvanic Isolation                                | -   |               |                |   | +/- 200V (DC - 50kHz)   |  |                        |            |
|                                      | Range   | +/- 1, 2, 5, 10, 20, 50 Vpk   |               |                |   | +/- 0.125, 0.25, 0.5, 1, 2, 5, 10 Vpk   |  |                        |            |
|                                      | Coupling  | DC / AC   |               |                |   | DC / AC   |  |                        |            |
|                                      | DC offset   | 0%  |               |                |   | +/- 250% of input range   |  |                        |            |
|                                      | Dynamic range                                     | 82dB (DC - 1MHz @ 16bit)<br>58dB (DC - 6.5MHz @ 12 bit)   |               |                |   | 72dB or better (0.1V - 10V)   |  |                        |            |
|                                      | Inter-channel phase difference                    | 0.1° or less (DC - 20kHz)<br>0.5° or less (DC -100kHz)  |               |                |   | 1.1° or less (DC - 10kHz)<br>2.2° or less (DC -50kHz)   |  |                        |            |
| ICP Input                            | Crosstalk   | -115dB or less (DC - 6.5MHz)  |               |                |   | -90dB or less (DC - 200kHz)   |  |                        |            |
|                                      | Range   | -   |               |                |   | +/- 0.125, 0.25, 0.5, 1, 2, 5, 10 Vpk   |  |                        |            |
|                                      | Power supply                                      | -   |               |                |   | 18V / 0 - 10mA (in 0.5mA steps)   |  |                        |            |
|                                      | Dynamic range                                     | -   |               |                |   | 72dB or better (0.1V - 10V)   |  |                        |            |
|                                      | Inter-channel phase difference                    | -   |               |                |   | 1.1° or less (DC - 10kHz)<br>2.2° or less (DC -50kHz)   |  |                        |            |
|                                      | Crosstalk   | -   |               |                |   | -90dB or less (DC - 200kHz)   |  |                        |            |
| Strain Gauge Input                   | Coupling  | -   |               |                |   | AC (Fc = 5Hz)   |  |                        |            |
|                                      | Range   | -   |               |                |   | +/- 1, 2, 5, 10, 20, 50, 100, 200mV   |  |                        |            |
|                                      | Bridge power supply                               | -   |               |                |   |   |  |                        |            |
|                                      | Constant Voltage                                  | -   |               |                |   | +/- 1, 2, 5, 10V  |  |                        |            |
|                                      | Constant Current                                  | -   |               |                |   | 0- 10mA (in 0.5mA steps)  |  |                        |            |
|                                      | Bridge Type                                       | -   |               |                |   | Full, Half and Quarter-Bridge (with or without sense line)  |  |                        |            |
|                                      | Resistor  | -   |               |                |   | 120 and 350 Ohm   |  |                        |            |
|                                      | Coupling  | -   |               |                |   | DC  |  |                        |            |
|                                      | Dynamic range                                     | -   |               |                |   | 60dB or better (1 - 5mV)<br>66dB or better (10 - 50mV)<br>72dB or better (100 - 500mV)  |  |                        |            |
| Auxiliary channels                   | Inter-channel phase difference                    | -   |               |                |   | 1.1° or less (DC - 10kHz)<br>2.2° or less (DC -50kHz)   |  |                        |            |
|                                      | Crosstalk   | -   |               |                |   | -90dB or less (DC - 200kHz)   |  |                        |            |
|                                      | Digital   |   |               |                |   |   |  |                        |            |
|                                      | No. Of channels                                   | 16  |               |                |   | 16  |  |                        |            |
| Trigger                              | Max sample frequenz                               | 20MHz (depends on analog sampling frequency)  |               |                |   | 500kHz (depends on analog sampling frequency)   |  |                        |            |
|                                      | No. of digital channel                            | 8   |               |                |   | 1   |  |                        |            |
| Mathe only on-line! not stand-alone! | Trigger on analog channels                        | Trigger on Level, Comparison, Region, Extrema in Region, Missing Event, Pre-Trigger   |               |                |   | Trigger on Level, Comparison, Region, Extrema in Region, Missing Event, Pre-Trigger   |  |                        |            |
|                                      | Mathematik on analog channels                     | FFT, Filter, Smooth, dy/dt, dy <sup>2</sup> /dt <sup>2</sup> , multiplication, addition, Histogram, Pulse width, Eff Value, Average, Integral |               |                |   | FFT, Filter, Smooth, dy/dt, dy <sup>2</sup> /dt <sup>2</sup> , multiplication, addition, Histogram, Pulse width, Eff Value, Average, Integral |  |                        |            |
| Operation Conditions                 | Save Mathe channels as additional analog channel  | Yes   |               |                |   | Yes   |  |                        |            |
|                                      | Power Supply                                      | 9 - 36VDC / 100 - 240VAC; 60 - 80W consumption  |               |                |   | 9 - 18VDC / 100 - 240VAC; 80 - 120W consumption   |  |                        |            |
|                                      | Environmental Temperature                         | <b>Operation:</b> +10°C to +40°C ; <b>Storage:</b> -30°C to +75°C   |               |                |   |   |  |                        |            |
| Dimensions                           | PC Connection                                     | SCSII-Interface, 8bit, 20MHz ULTRA; IEEE1394 400Mbit/s; USB 1.0; USB 2.0; Ethernet 10/100/1000  |               |                |   |   |  |                        |            |
|                                      | Operation System                                  | Win95B; Win98; Win98SE; Win2000; WinXP SP1; WinXP SP2;  |               |                |   |   |  |                        |            |
|                                      | Front-End all systems:                            | Height: 63 mm,  |               | Width: 325 mm, |   | Depth: 280 mm,  |  | Weight: approx. 4,5 kg |            |
| Power supply Front-End               | Height: 44 mm,                                    |   | Width: 75 mm, |                | Depth: 166 mm,                                    |   | Weight: approx. 660 g                      |                        |            |
| 19" Rack                             | Channels: 32,                                     |   | Height: 3 HE, |                | Width: 500 mm,                                    |   | Depth: 460 (490) mm, Weight: approx. 20 kg |                        |            |
| Power Supply for 19" Rack            | 11 - 13VDC / 100 - 240VAC; 120 - 160W consumption |   |               |                | 11 - 13VDC / 100 - 240VAC; 160 - 240W consumption |   |  |                        |            |