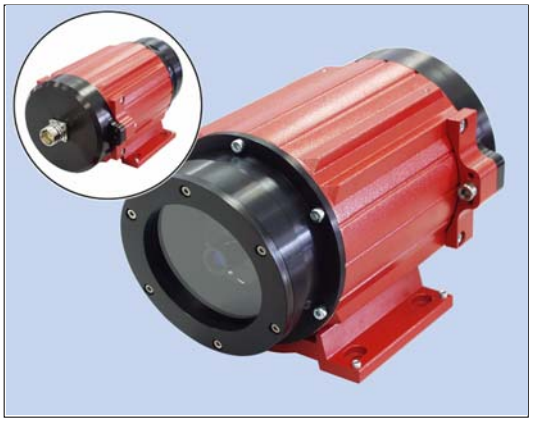
TR ELECTRONIC GmbH
Eglishalde 6
D-78647 Trossingen
Tel. +49 - (0) 74 25 / 228 - 0
Fax +49 - (0) 74 25 / 228 - 33
http://www.tr-electronic.de
Germany

Laser Measuring Device LE-200 SSI



- **Robust**
- **Measurement of Linear Movement**
- **Non Contact Distance Measurement**
- **Measuring Distance Up To 125m, 170m, 195m other distances on request**
- **Programmable**
- **SSI-Interface (Synchronous-Serial Interface)**

Electrical Data

Measurement Principle	Phase shift measurement
Range (LE-200 to Reflector)	0.2 – 125 m standard, 170m, 195m (special devices)
* Resolution	selectable, physical resolution 0.1 mm
Linearisation	
up to 12m (standard)	absolute linearity error ±3 mm
complete measuring length	absolute linearity error ±5 mm
Supply Voltage	18-27 V DC ± 5 %, 24 V DC ± 5 % (device with heating)
Power Dissipation (No Load)	< 6 Watt, < 60 Watt (device with heating)
Light Source	Laser Diode (Red Light)
Wave Length λ	670 nm
Maximum Laser Power	P ≤ 1 mW
Laser Protection Class	2 according to DIN EN 60 825-1: 2001-11
Average Lifetime (25°C / 77° F)	50 000 h
Measurement Value Output / Cycle Time	1000 values per second
Integration Time	1 ms
Reproduction	± 2 mm
Programmable via RS485	PC IBM compatible (TRWinProg software)
SSI-Interface:	Clock input: Opto Coupler isolated / Clock frequency: 80 kHz - 820 kHz
* Output Code:	Binary, Gray
* SSI Output Value	Position, Intensity, Speed
Cable Length	Dependent on cable cross section, shielding, clock frequency etc.
Data Output	RS422 (2-wire)
* Number of data bits	24 - 26, with error bit transmission (temperature, intensity, hardware)
* Switching input / Switching output	
Levels switching input	1-level > +8V, 0-level < +2V, up to ±35V, 5 kOhm
Levels switching output	1-level > US-2V, 0-level < 1 V, up to 100mA
Pin Configuration	Upon Request

* programmable parameter

Environmental Data

Electromagnetic compatibility	EN 61000-4-2 (IEC-801-2) / EN 61000-4-4 (IEC-801-4)
Operating Temperature	0° to 50°C (32° F to 122° F), -30° to +50°C (device with heating)
Thermal drift	1 ppm / °C, related to the max. measuring length of 125 m, 170 m or 195 m
Storage temperature range	-20° to 75°C (- 4° F to 167° F)
Relative Humidity	98 % (non condensing)
* Protection Class	IP 65 (DIN 40 050)

* The protection class is valid for the device with a screwed-on mating connector and screwed-together cable gland.

TR ELECTRONIC GmbH
Eglishalde 6
D-78647 Trossingen
Tel. +49 - (0) 74 25 / 228 - 0
Fax +49 - (0) 74 25 / 228 - 33
http://www.tr-electronic.de
Germany

Mechanical Data

Vibration (50-2000 Hz Sinusoidal DIN IEC 68-2-6 ..... ≤ 50 m/s² (5g)
Shock (11ms) DIN IEC 68-2-27..... ≤ 300 m/s² (30g)
Mechanical Special Types ..... Upon Request
Connection ..... 12 pole Contact Bullet Connector, axial

Dimension drawing