EOS Optronics GmbH has recently developed a medium range kHz Laser Rangefinder (KLRF). The KLRF is intended as a platform for high rate measuring application in a controlled environment.

The KLRF has been designed by EOS Optronics GmbH in Deggendorf to enable easy mounting, accessible servicing, and flexible PC controlled operation. The KLRF returns range data to a customer provided control unit (PC or other) via an RS232 serial control. The KLRF includes a feature to enable tracking of very fast moving objects (up to 300 m/sec), return range, and rate of change data.

The KLRF operates on a single photon counting principle. EOS Optronics GmbH has developed a proprietary technology that allows this ranging principle to work even in full daylight conditions.

**KLRF Features**
- One connector CONN. 9-WAY MICRO D- SOCKET
- RS 232 asynchronous serial control
- Range/rate data return
- In-built statistical analysis to accurately determine rate
- Based on single photon counting principle
- Designed for daylight operation
Technical Specifications

Voltage input: 18 to 32 V dc (nominal 28 V dc)
Operating temperature: 5°C to +50°C
Lase rate: Up to >10 kHz (depending on mode)
Laser range capability\(^1\): 50 – 1500 m
Range accuracy: ±1 m
Range resolution: < 1 m
Maximum trackable target acceleration rate: 150 m sec\(^2\)
Maximum target rate: 300 m/sec
Laser classification: Class 3b
Minimum eyesafe distance: 45-70 m varies according to operation mode
Wavelength: 946 nm
Radiant energy: < 10 µJ
Depth: 37 mm
Width: 96.8 mm
Length: 271.5 mm
Weight: < 1.0 kg

\(^1\)Target size = 2.3 m x 2.3 m, Visibility = 23.5 km, Target refl. = 15 % and target is oriented at right angles to laser line of sight. Target size = Ø 75 mm max range 300 m

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