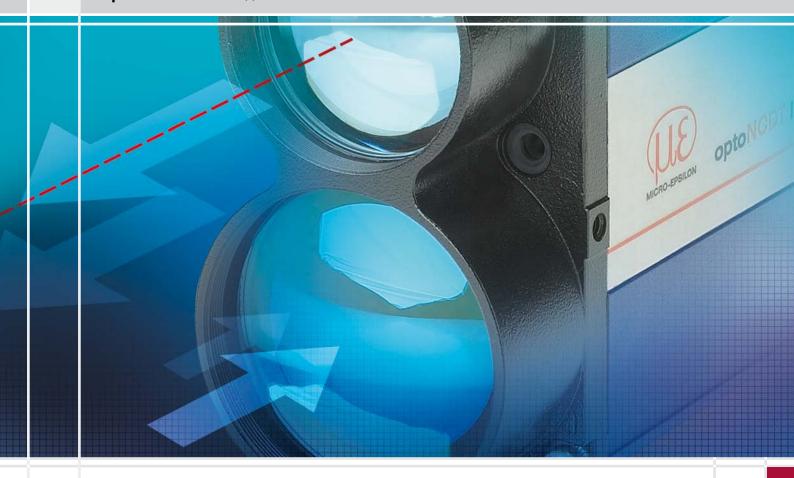


More Precision

optoNCDT ILR // Laser distance sensors

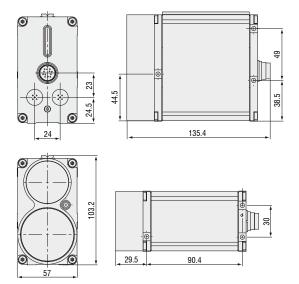


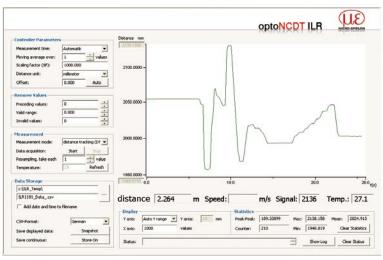


- Measuring range 500m in diffuse reflecting surfaces, up to 3000m with reflector
- Distance and speed measurement
- Integrated heating
- For fast measuring events
- Easy installation
- Accessories for harsh environments

Sensors in the optoNCDT ILR 1191 series are optoelectronic sensors for non-contact distance and speed measurement for industrial use. The sensor is designed for very large measuring ranges, with and without reflector. Due to the very high measuring rate of the sensor, moving objects can be measured easily. The sensor operates according to the laser pulse runtime principle and is therefore particularly well suited to applications with large distances.

Commissioning of the sensor is straightforward due to a variety of interfaces and easy mounting options. The optoNCDT ILR 1191 is fitted with an integrated heater for outdoor use. A sighting device is also integrated for alignment.





Configuration and measurement software for ILR1191

Model		ILR1191-300		
Measuring range ¹⁾	black 6%	1 150m		
	grey 10%	0.5 200m		
	white 90%	0.5 300m		
	reflector	300 3000m		
Speed		0ms ⁻¹ 100ms ⁻¹		
Linearity 2)		±20mm (at measurement output 100Hz) ±60mm (at measurement output 2kHz)		
Resolution		1mm		
Repeatability		≤20mm		
Response time	distance measurement	0.5ms		
	speed measurement	12ms		
Laser class	measuring laser	905nm, laser class 1		
	sighting laser	635nm, laser class 2		
Operation temperature		-40°C +60°C		
Storage temperature		-40°C +70°C		
Limit outputs		QA/QB (max. 200mA)		
Switching points		free adjustable		
Switching hysteresis		free adjustable		
Trigger input		trigger edge and trigger delay programmable, trigger pulse max. 30V		
Serial interface		RS232 and RS422 with 1.2kBaud 460.8kBaud SSI interface (RS422), 24Bit, Gray-encoded 50kHz 1MHz		
Profibus		RS485, 9.6 kBaud 12MBaud		
Operation mode		single/continuous measurement, external triggering (adjustable near field elimination), speed measurement		
Analogue output		4 20mA (16 Bit DA)		
Temperature stability		≤50ppm/°C		
Supply		10 30 V DC		
Max. consumption		<5W without heating, 11.5W with heating		
Connection		1 x 12-pin M16, 2 x 5-pin M12 B-coded		
Protection class		IP 67		
Material (housing)		aluminium strangeness profile, powder-coated		
Weight		800g (depends on equipment)		
Vibration/Shock		500g, 0.5ms, 1 shock/axis (DIN ISO 9022-30-08-1)		
		10g, 6ms, 1000 shocks/axis (DIN ISO 9022-3-31-01-1)		
EMV		EN 61000-6-2, EN 55011		
Accessoires		page 14 - 15		
0.1 0.00	P. L			

¹⁾ depending on target reflectivity, stray light effects and atmospheric conditions

Product identification ILR 1191 - 300 (0 x)

Serial interface -1 = RS232 2 = RS422 3 = RS232 + SSI 4 = RS232 + Profibus



optoNCDT ILR 1191 use a semiconductor class 1 laser (operating mode) and a semiconductor class 2 laser (setup mode). With these classes no protection is needed.

Spot diameter ILR1191

measuring laser	45mm	155mm	240mm	538mm	5128mm
sighting laser	ø17mm	ø82mm	ø133mm	ø307mm	ø3007mm
	10m	75m	125m	300m	3000m

²⁾ with statistical spread of 95%

High performance sensors made by Micro-Epsilon



Sensors and systems for displacement and position



Sensors and measurement devices for non-contact temperature measurement



2D/3D profile sensors (laser scanner)



Optical micrometers, fibre optic sensors and fibre optics



Colour recognition sensors, LED analyzers and colour online spectrometer



Measurement and inspection systems

