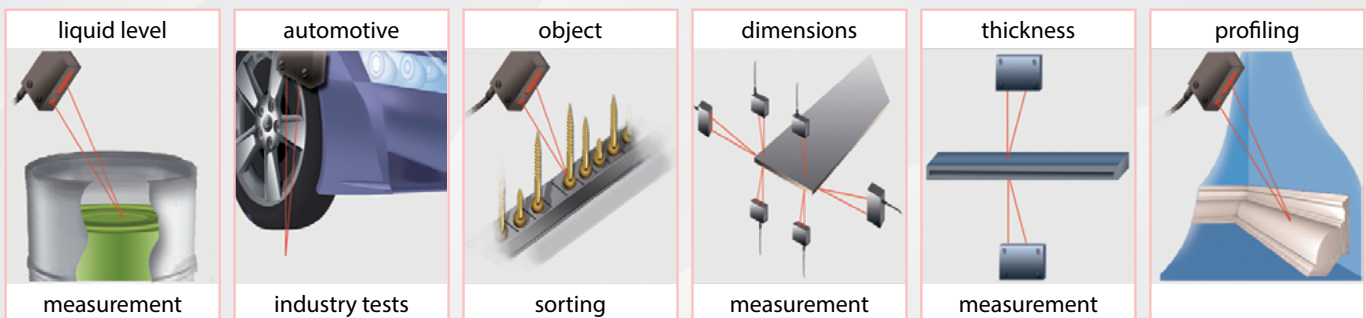# LASER TRIANGULATION SENSORS
RF605 SERIES

Position, dimensions, surface profiles, deformations, vibrations measurement, sorting and sensing presence or absence

- Compact laser sensors
- Measuring ranges from 50 to 500 mm
- Linearity ±0.1%
- Resolution ±0.02%
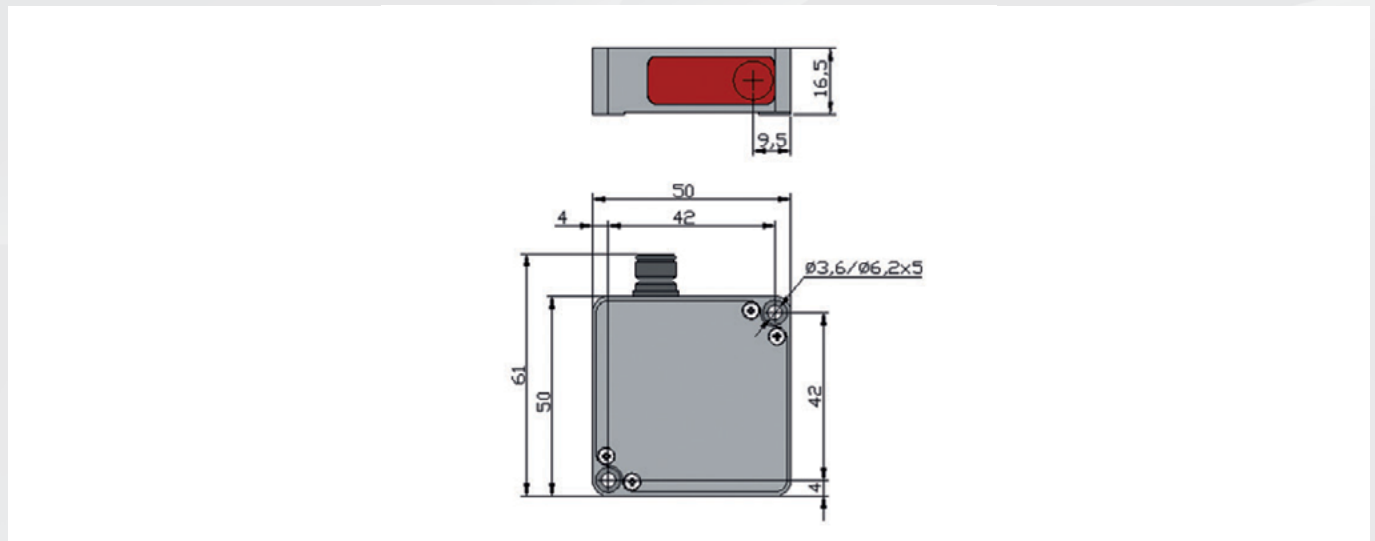- Sampling rate up to 2000 Hz
- RS232/RS485 +4...20 mA/0...10V

liquid level	automotive	object	dimensions	thickness	profiling
measurement	industry tests	sorting	measurement	measurement	

BASIC TECHNICAL DATA

RF605-		25/50	45/100	65/250	105/500
Base distance X, мм		25	45	65	105
Measurement range, mm		50	100	250	500
Linearity, %		±0.1 of the range			
Linearity, µm		50	100	250	500
Resolution, %		0.02 of the range			
Resolution, µm		10	20	50	100
Temperature drift		0,02% of the range/°C			
Max. sampling frequency, Hz		2000			
Light source		red semiconductor laser, 660 nm wavelength			
Output power, mW		≤0,95 mW			
Laser safety Class		2 (IEC60825-1)			
Output interface	digital	RS232 (max. 460,8 kbit/s) or RS485 (max. 460,8 kbit/s)			
	analog	4…20 mA (£500 Ω load) or 0…10 V			
Synchronization input		2,4 – 5 V (CMOS, TTL)			
Logic output		programmed functions, NPN: 100 mA max; 40 V max for output			
Power supply, V		24 (9 …36)			
Power consumption, W		1,5..2			
Environment resistance	Enclosure rating	IP67 (for sensors with cable connector only)			
	Vibration	20g/10…1000Hz, 6 hours, for each of XYZ axes			
	Shock	30 g / 6 ms			
	Operation temperature, °C	-10…+60			
	Relative humidity	35-85%			
	Storage temperature, °C	-20…+70			
Housing material		aluminum			
Weight (without cable), gram		60			

Certified according to ISO 9001:2008

RIFTEK
Sensors & Instruments

OVERALL DIMENSIONS

Sensors are equipped by cable gland or connector.

EXAMPLE OF DESIGNATION WHEN ORDERING

RF605-X/D-SERIAL-ANALOG-IN-AL-CC(R)-M

Symbol	Description
X	Base distance (beginning of the range), mm
D	Measurement range, mm
SERIAL	Type of serial interface: RS232 - 232, or RS485 - 485
ANALOG	Attribute showing the presence of 4…20 mA (I) or 0…10V (U)
IN	Trigger input (input of synchronization) presence
AL	Programmed signal, which has triple purpose. It can be used as 1) logical output (indication of run-out beyond the range) 2) line of mutual synchronization of two and more sensors 3) line of hardware zero setting
CC(R)	Cable gland - CG, or cable connector - CC (Binder 702, IP67) **Note 1:** R option – robot cable
M	Cable length, m
Example. RF605-105/500-232-I-IN-CG-3 –base distance – 105 mm, range – 500 mm, RS232 serial port, 4…20mA analog output, trigger input is available, cable gland, 3 m cable length.	