



# HF-250C

## Optical Laser Height Sensor with CORREVIT® SF housing profile for **Non-Contact Distance Measurement**

- The profile of the HF-250C Sensor is shaped to match the CORREVIT® SF II Optical Sensor. This enables HF and SF II Sensors to be bolted together for simultaneous use on a single mounting system.
- Compact design
- With spray guard for better performance in wet conditions
- Measuring 100 ... 350 mm
- For static and dynamic measurement
- Easy to mount
- Analog, RS232, and CAN Bus output
- Tested and used under extreme environmental conditions

### **Function:**

The CORRSYS-DATRON HF-250C Sensor uses the principle of optical triangulation. A visible red laser is focused onto the road surface. Reflected light is collimated onto a linear CCD array. The distance to the object is calculated from the position of the light spot on the CCD array. The output of the sensor is directly proportional to the measured height.

### **Application:**

The compact CORRSYS-DATRON HF-250C Sensor is designed for use in dynamic vehicle testing applications that require accurate measurement of the following variables:

- Ride height
- Displacement
- Determination of pitch & roll angle
- Tire deflection
- Dynamic camber angle measurement with two HF Sensors  
(see the CORRSYS-DATRON DCA-System)
- Tire lift-off (Fishhook Test)

The HF-250C Sensor is configured with the CORRSYS-DATRON Software CeCalWin Pro via the serial port (RS232).



## Typical Technical Specifications

### Technical Specifications

Measuring range:	100 ... 350 mm
Resolution:	0.1 mm
Linearity:	±0.2%
Sampling rate *:	1 ... 8 kHz
Light source:	Laser
Laser Power:	< 5 mW
Laser Class:	3R (IEC 60825-1)
Wave length:	660 nm (red)
Approx. spot size:	1 mm x 2 mm

### Outputs

Analog, RS232, CAN bus

### System Specifications

Output voltage	0 ... 10 V
Power supply:	9 ... 18 V; (125 mA @ 12 V DC)
Temperature range:	
Operating:	-5 ... 60°C
Storage:	-10 ... 70°C
System protection of the sensor:	IP 67
Weight:	155 g (without cable)
Dimensions of the sensor (l x w x h):	100 mm x 20 mm x 40 mm' (without spray guard)
Case:	aluminum, anodized

\* Sampling rates up to 8kHz are possible on surfaces with high reflection

The HF-250C Sensor is compatible with the standard CORRSYS-DATRON mounting system.

