

# 2D OPTICAL MICROMETERS, RF656.2D SERIES

## PURPOSE

Micrometers are designed for non-contact two-dimensional measurements of linear dimensions, diameters, angles, thread pitch, shape of parts, etc.

## WORKING PRINCIPLE

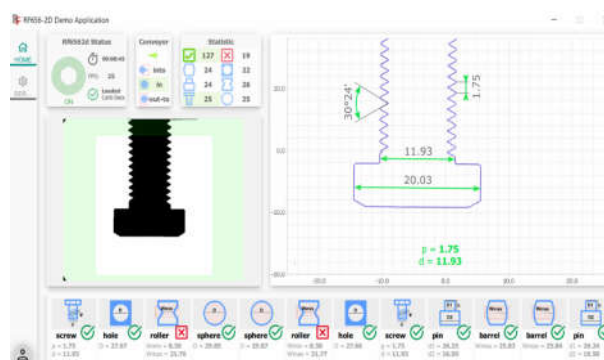
The micrometer operation is based on the so-called shadow principle. The micrometer consists of two parts - an emitter and a receiver. The light from the LED is collimated by the lens. When placing an object in the area of the collimated beam, the resulting shadow image of the object is scanned by a 2D CMOS sensor. Based on the location of the shadow border, the computer calculates the dimensions of the object.

## MAIN FEATURES

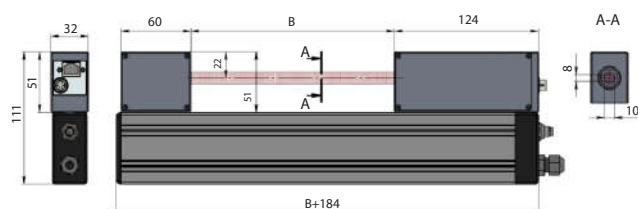
- Simultaneous measurement of multiple geometric parameters
- Measurement accuracy:  $\pm 1.5 \mu\text{m}$
- Measurement speed: 130 images/s



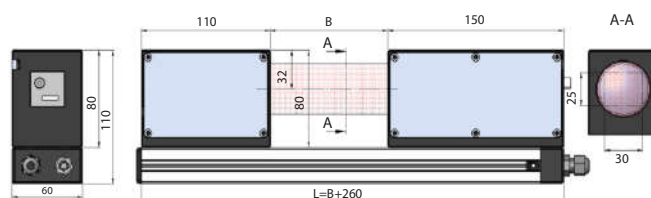
PF656.2D	-8x10	-25x30	-30x40	-40x50
Measurement range, mm	8x10	25x30	30x40	40x50
Measurement accuracy, $\mu\text{m}$	$\pm 1.5$	$\pm 2.5$	$\pm 3$	$\pm 4.5$
Smallest detectable object, mm	0.07	0.2	0.25	0.35
Measurement frequency, Hz	130 (50 with triggering)			
Dimension B, see drawings below	20...100	20...259	20...250	20...500
Controller	SmartUnit-M			
Weight, not less, kg	1.1	2.3	2.8	5.6



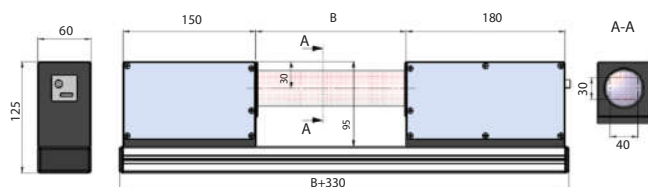
### RF656.2D-8x10



### RF656.2D-25x30



### RF656.2D-30x40



### RF656.2D-40x50

