



3D sensors with an extremely attractive **price-performance ratio**



High accuracy with **up to 6 kHz scan rate**



Lightweights (180 g) in **ultra-compact design**

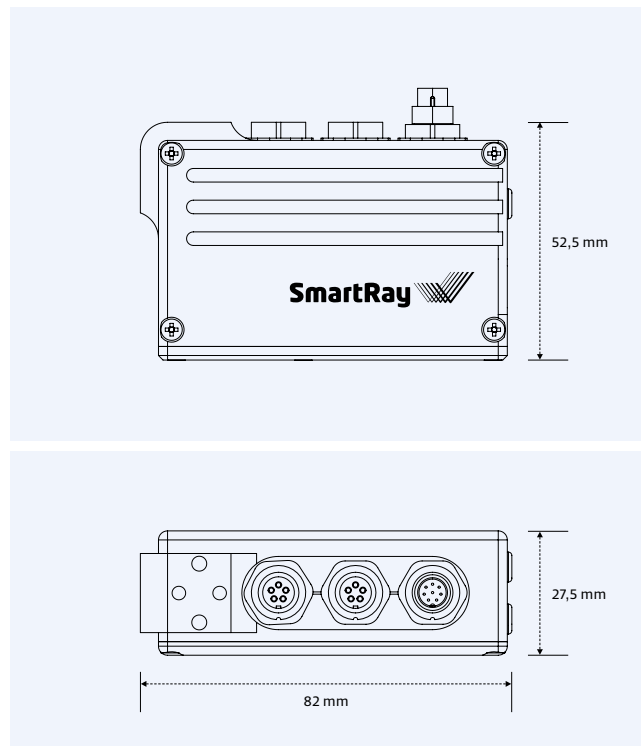
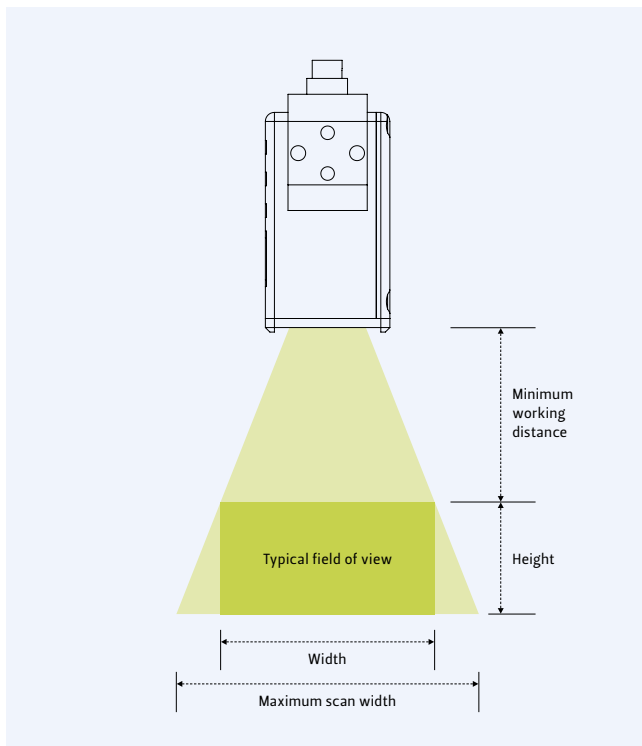


SmartRay ECCO Series

The most compact 3D sensors in the world

The SmartRay ECCO series is your perfect start into the world of 3D visioning. The ultra compact shape and the light weight, is ideal for limited spaces and the installation on robot arms. The easy integration and the robust design meets the requirements of a factory floor and allows 3D image processing with an perfectly balanced price/performance ratio.

Type	ECCO 35.050	ECCO 35.100	ECCO 55.050	ECCO 55.100
Max. profile [rate per second]	500	500	6000	6000
Typical field of view Width [mm]	35	60	50	80
Typical field of view Height [mm]	50	100	60	100
Maximum scan width [mm]	55	100	75	140
Minimum working distance [mm]	120	100	120	100
Typical lateral resolution [μm]	65	100	130	200
Typical vertical resolution [μm]	8	10	15	20
Interfaces:	Ethernet 100 Mbit/s			
Input	5 – 24V (DC-isolated)			
Output	24V (DC-isolated)			
Feed-in	24 VDC \pm 10 % 0,3 A			
Optical indicator	LED			
Weight ca.	180 g			
Laser wavelength	660 nm			
Laser class	2 M			
Max. ambient light	10.000 lx			
EMC test	EN 61 000-6-2:2001, EN 61 000-6-4:2003	EN 61 000-6-2:2001, EN 61 000-6-4:2001	EN 61 000-6-2:2001, EN 61 000-6-4:2004	EN 61 000-6-2:2001, EN 61 000-6-4:2002
Vibration/shock test	EN 60 068-2-6, -27, -29, -66	EN 60 068-2-6, -27, -29, -64	EN 60 068-2-6, -27, -29, -67	EN 60 068-2-6, -27, -29, -65
Electrical safety	EN 61 010-1-3:2003	EN 61 010-1-3:2001	EN 61 010-1-3:2004	EN 61 010-1-3:2002
Protection class	III, EN 61 040-3:2004	III, EN 61 040-3:2002	III, EN 61 040-3:2005	III, EN 61 040-3:2003
Enclosure rating	IP 65 (EN 60 529-10-1991)			
Air humidity	max. 9 %, non-condensing			
Temperature (operation/storage)	0 – 40 °C / -20 – 70 °C			



Ready for metrology

The calibration method developed by SmartRay guarantees precision in the micrometre range. Each unit is individually calibrated with a variety of reference points within the field of view. Even tiny differences in optics or installation are corrected, therefore the devices are very easy to replace.

Control your 3D sensor with a few mouse clicks

The intuitive user interface makes easy work of setting up the sensor and visualising your images: With one click from a 3D profile to a calibrated Point Cloud. In addition, the StarterKit from SmartRay offers the complete SDK and drivers for popular software libraries.