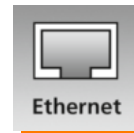


Volume determination for storage and conveyor technology



Flexible and universal use for stationary or moving objects

- Non-contact dimensioning of rectangular objects such as cardboard packages or parcels
- Determination and comparison of dimensions, orientation and position
- Provides height, width and length to calculate strap length and volume
- Quality parameters help with the detection of damaged or deformed objects
- Switching outputs and Ethernet process data interface



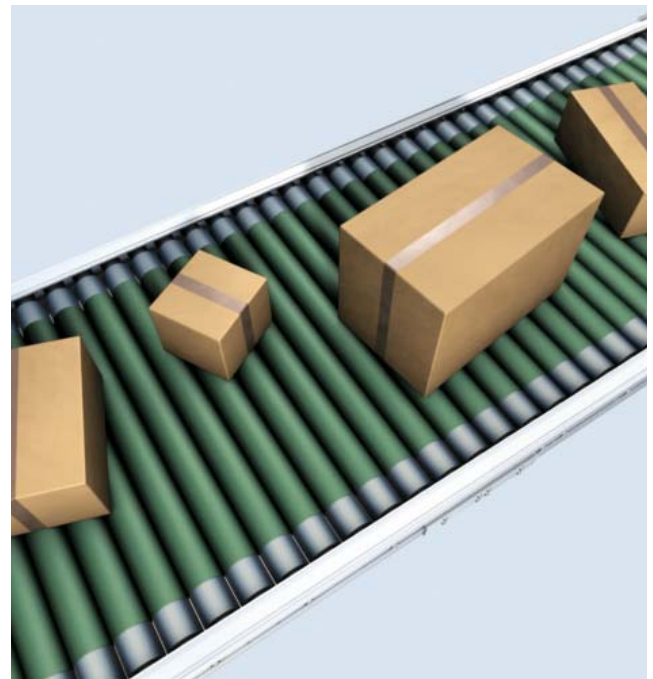
The revolution in intralogistics

Whether pallets, post room, storage building, logistics or distribution centre: The storage volume that can be used defines the capacity and the costs.

A good reason to ensure the best-possible use of the space requirement during feeding.

The new 3D sensor detects the dimensions of the goods via innovative time-of-flight technology. It signals via threshold values if e.g. package parameters are outside the defined areas.

For automated storage space planning via WMS (Warehouse Management System) or ERP system (Enterprise Resource Planning) it provides the size, orientation and position of the objects. The data is also used for controlling robots, sorting equipment and distribution gates. Besides robustness the sensor is also distinguished by user-friendly handling and simple integration.



Type of sensor	Material housing	Material front pane / LED window	Protection rating, protection class	Angle of aperture [°]	Max. field of view size [m]	Order no.
PMD 3D sensors · Type O3D · M12 connector						
PMD 3D ToF chip	Aluminium	Gorilla glass / polyamide	IP 65 / IP 67, III	40 x 30	2.61 x 3.47	O3D300
PMD 3D ToF chip	Aluminium	Gorilla glass / polyamide	IP 65 / IP 67, III	60 x 45	3.75 x 5.00	O3D302
PMD 3D ToF chip	Stainless steel	Polycarbonate / polyamide	IP 66 / IP 67, III	40 x 30	2.61 x 3.47	O3D310
PMD 3D ToF chip	Stainless steel	Polycarbonate / polyamide	IP 66 / IP 67, III	60 x 45	3.75 x 5.00	O3D312





Technical data Dimensioning of the object		
Operating distance	[m]	0.3...5
Object type		Rectangular
Min. object size	[mm]	100 x 100 x 100
Object speed	[m/s]	< 0.2
Typical accuracy for object size	[mm]	± 10
Typical accuracy for object position	[mm]	± 5
Typical accuracy for angle of rotation	[°]	± 1
Sampling rate / switching frequency [Hz]		1

Further technical data		
Operating voltage	[V DC]	20.4...28.8
Current consumption	[mA]	< 2400 peak current pulsed; typ. mean value 420
Current rating (per switching output)	[mA]	100
Short-circuit protection, pulsed		•
Overload protection		•
Ambient temperature	[°C]	-10...50
Real chip resolution		25,000 / 100,000
Resulting resolution		176 x 132 pixels
Function display	LED	2 x yellow, 2 x green
Illumination		850 nm, infrared
Ambient light	[lux]	Max. 10,000 (indoor)
Trigger		External; 24 V PNP/NPN according to IEC 61131-2 type 3
Switching inputs		2 (configurable), 24 V PNP/NPN according to IEC 61131-2 type 3
Switching outputs		3 (configurable), 24 V PNP/NPN, according to IEC 61131-2
Parameter setting interface Ethernet		10 Base-T / 100 Base-TX
Possible parameter settings		Via PC / notebook
Dimensions (H, W, D)	[mm]	72 x 65 x 85




Accessories

Type	Description	Order no.
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Mounting accessories

	Mounting set for O3D	E3D301
	Cooling element	E3D302
	Double cooling element	E3D304
	Heat conductor	E3D303

Connection technology

	Ethernet, cross-over patch cable, 2 m, PVC cable, M12 / RJ45	E11898
	Ethernet jumper, 2 m, PVC cable, M12 / M12	E21138
	Socket, M12, 2 m black, PUR cable, 8 poles	E11950