

## Datasheet



### RS-C-025-1600-ECT

#### SPECIAL FEATURES

- + Especially high resolution of 2.5 mm
- + Virtually dot-shaped beam geometry arranged on a single optical plane
- + Extremely high measurement rate:  
Parallel beam > 315 measurements/sec.
- + EtherCAT slave interface with access to all measurement data from each measurement CoE (CiA DS-301)
- + Integrated dual port EtherCAT switch (In Port / Out Port)
- + EtherCAT fieldbus interface ensures the availability of the object data from each individual measurement
- + Transparent objects can be evaluated at full measurement rate
- + Connection port for rotary encoder
- + Standard industry M12 plug connectors
- + Corrosion-resistant and easy to clean plastic housing

#### DATA TABLE

##### Technical features

Technology	Emitter / receiver
Purpose	Measuring automation light curtain with real time fieldbus connection
Beam spacing	2.5 mm
No. of diodes	640
Monitoring height	1600 mm
Operation range	0...2500 mm
Measurement cycle	3,20 ms with parallel beam if all beams are activated

##### Electrical data

Protection class	III
Supply voltage	18...30 VDC
Power consumption	approx. 665 mA (@24 VDC), no external loads
Initialization time	approx. 30s

##### Interfaces

Switch output	2 x PNP, NPN or PP, each 100 mA max., Overload and short-circuit protected
Data interface	EtherCAT with integrated dual port EtherCAT switch, 2 x M12 jack / 4-pin / D-coded

##### Mechanical data

Construction	Frame: fibre-reinforced polyamide / Window: transparent polyamide
Dimensions	40 x 40 x 1627,5 mm; Additional space required in the plug area, see dimensioned drawing
Weight	T: 1,70 kg   R: 1,98 kg
Environmental rating	IP67

##### Environment

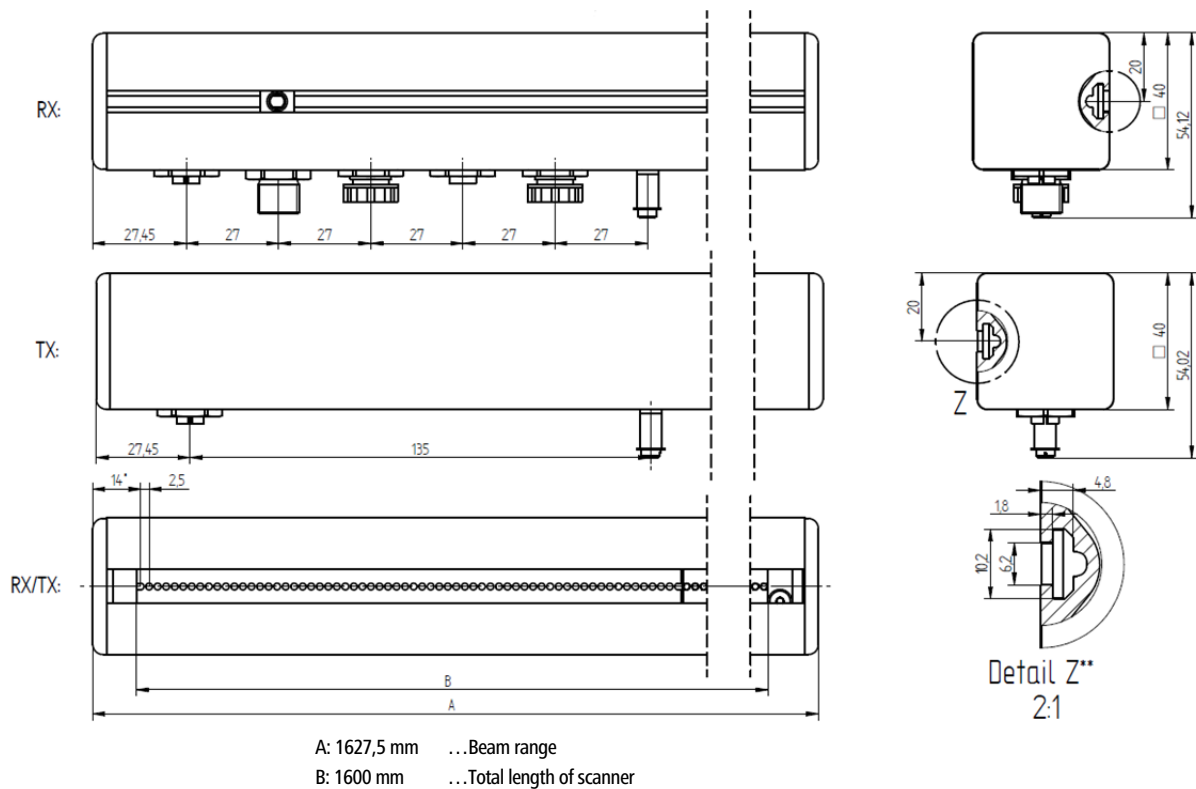
EMC	according to EN 60947-5-2
Ambient temperature	operation: -30°C...+55°C / storage: -40°C...+70°C
Vibration resistance / shock proof	according to EN 60947-5-2

**EtherCAT<sup>®</sup>**

EtherCAT<sup>®</sup> is registered trademark and patented technology,  
licensed by Beckhoff Automation

## PRACTICAL BENEFITS

- + Higher conveyor belt speeds
  - + Increased object throughput
  - + Smaller beam geometry and layout of the beams on a single optical level permit more precise object localization
- + More detail-rich object mapper via analogue object evaluation
  - + The integrated dual switch permits linear wiring. This reduces the amount of cabling work and no external switch is required.
  - + direct connectivity for rotary encoder



## PLUGS AND SIGNALS

- X1** Synchronization and power supply to emitter unit, M12 jack (female) / 8-pin / X-coded CAT6A
- X2** Power supply input, switching outputs / encoder inputs, trigger input, M12 plug (male) / 5-pin / A-coded
- X3** Power supply output to downstream RapidoScan, service interface, trigger output, M12 jack / 5-pin / A-coded
- X4** EtherCAT (IN), M12 jack / 4-pin / D-coded
- X5** EtherCAT (OUT), M12 jack / 4-pin / D-coded
- X6** FE connection, M4 screw connection

