

GridScan/Mini

Technical data

FEATURES

- ▶ Criss-cross beams
- ▶ SIL 2 certified (TÜV approved)
- ▶ FSS version fulfills SIL 2 without testing
- ▶ Direct integration into the door edge (SB and DB types)
- ▶ Door speeds up to 1.6 m/s
- ▶ Waterproof housing (IP67) and very high light reserve make the GridScan/Mini insensitive to dust, dirt and water
- ▶ Electrical synchronization for increased light and strobe immunity
- ▶ Short-circuit proof semiconductor output PNP/NPN (push-pull) or FSS output
- ▶ Cross section only 12 mm × 16 mm



OPTICAL

Operating range	1 ... 10 m
Number of elements	4 ... 50
Max. protection height	2,500 mm
Aperture angle at 3 m	Tx: $\leq \pm 10^\circ$ and Rx: $\leq \pm 20^\circ$
Max. ambient light	100,000 Lux

MECHANICAL

Cross section	12 mm × 16 mm
Housing material	Natural anodized aluminum
Enclosure rating	IP67
Temperature range	-40°C ... +60°C

ELECTRICAL

Supply voltage U_{sp}	10 ... 30 VDC
Current consumption at 24 VDC	100 mA
Output	PNP/NPN (push-pull) or FSS
Output load	100 mA, 100 nF
Typ. response time with 32 elements	90 ms
Max. door speed	1.6 m/s
Status LED Rx:	Object detected red
	No object detected green
Power LED Tx:	Power ok green

GENERAL

EMC emission	EN 61000-6-3:2007, EN 12015:2014
EMC immunity	EN 61000-6-2:2005, EN 12016:2013
Vibration	IEC 60068-2-6:2007
Shock	IEC 60068-2-27:2008
RoHS	2011/65/EU
Certificates	CE, TÜV
Safety category	EN ISO 13849-1:2008, Cat. 2, PL D EN 61508:2010, SIL 2 EN 12978:2009 (SB type, excl. IEC 61496-2:2006)
Applicable standards	UL 325:2012

TYPES

GridScan/Mini-SB	With door blanking feature according to EN 12978:2009
GridScan/Mini-DB	With door blanking feature
GridScan/Mini-ST	For static applications without door blanking function

CONNECTION CABLE AND ELECTRICAL CONNECTION

Synchronization cable

Length	10 m
Diameter	Ø 3.5 mm
Material	PVC, black
Plug color	Black
Wires	AWG26
• brown	U_{sp}
• blue	GND (0 V)
• black	Communication
• white	Test signal

Connection cable

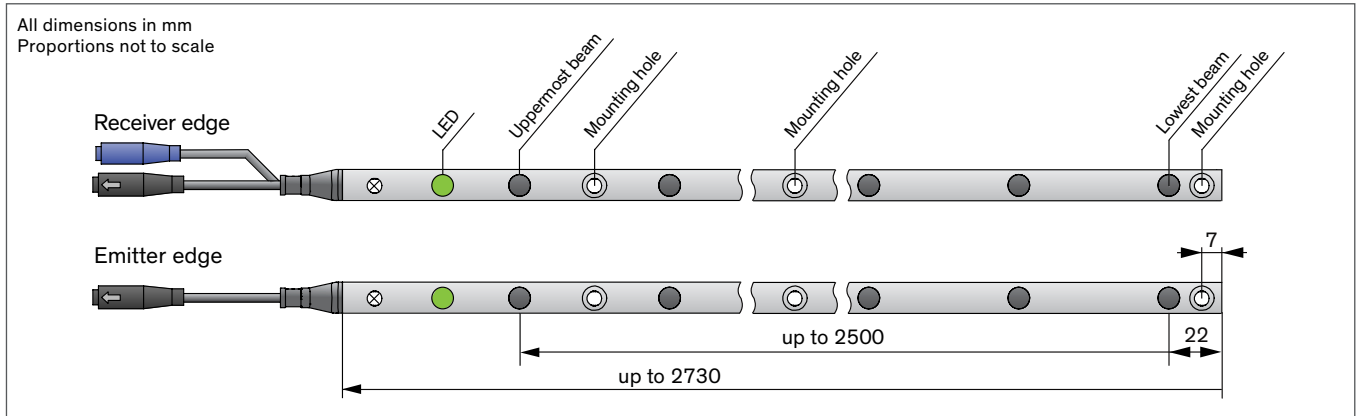
Cable length	5 m
Diameter	Ø 4.2 mm
Material	PVC, black
Plug color	Blue
Wires	AWG26
• brown	U_{sp}
• blue	GND (0 V)
• black	Output 1 (PNP/NPN or FSS)
• white	Test input
• gray	Selectable output logic
• green	Not used or Output 2 (PNP/NPN)



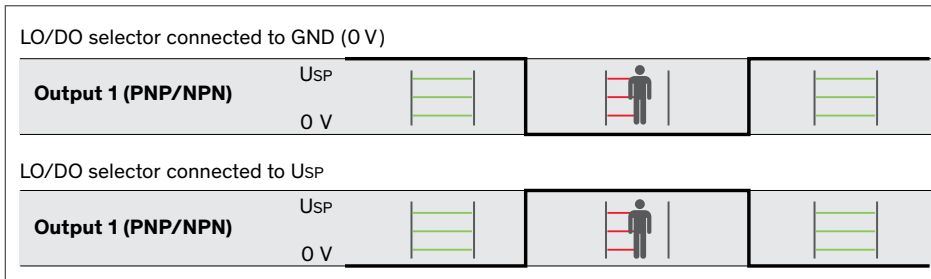
EN 13849-1

CEDES AG is certified according to ISO 9001: 2015.

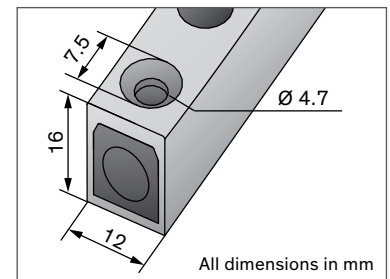
Dimensions



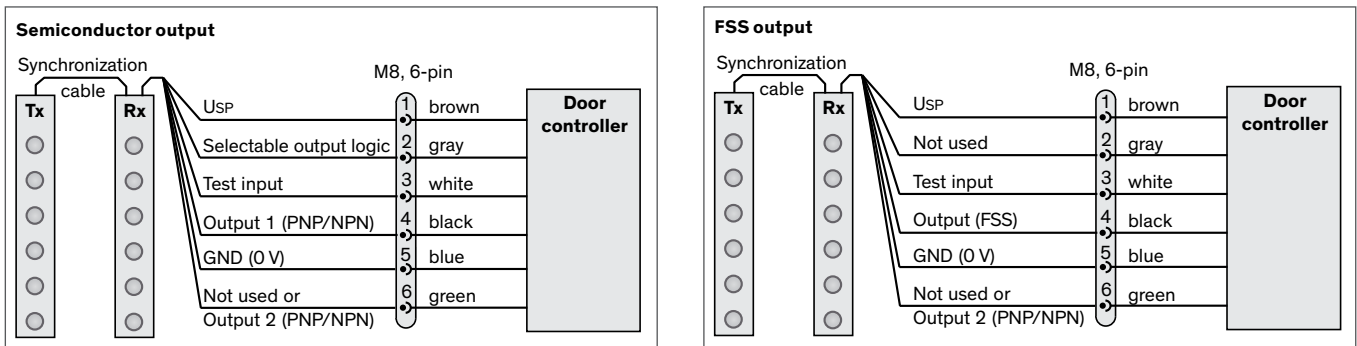
Selectable output logic



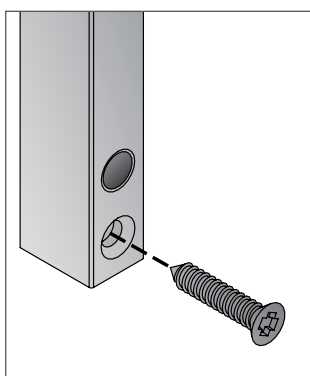
Detailed view



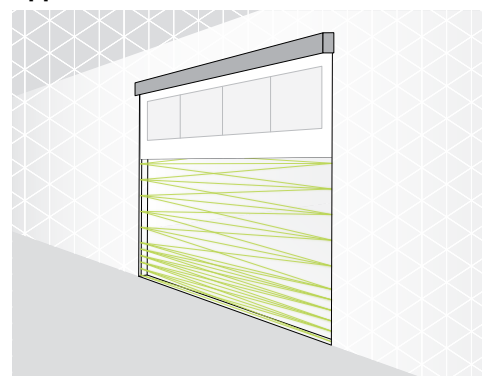
Connection diagram



Front mounting



Applications



High-speed and sectional doors (with door blanking)



Sectional doors (static mounting, without door blanking)