

**Description**

- 0-10 metre sensing range
- 4 to 384 channels (parallel beams)
- 10 to 1150 cross scanning beams
- Active length of 65 mm to 1920 mm
- Housing length of 160 mm to 1980 mm
- Plug connection
- Automatic or manual adjustment
- Parallel or cross beam scan mode
- Configurable blanking function
- 33x36 mm aluminium housing with T-slot mounting
- High tolerance to hostile environments
- IO-Link communication interface
- 5 pin, IO-Link / push-pull output
- PC software for parameter configuration and diagnostics with optional USB-IO-Link Master 02



The SS 01-10 series is an advanced industrial light curtain system which consists of a self-contained transmitter SST and receiver SSR, which are to be positioned opposite of each other. The light curtains are housed in a sturdy aluminium profile (33 x 36 mm) with T-slot mounting rail, available in lengths ranging from 160 mm to 1980 mm.

The SS 01-10 series is equipped with an IO-Link communication interface which allows a variety of process parameters and settings to be configured and monitored, which includes: automatic or manual gain adjustment, long or short range in automatic mode, light or dark selection, parallel or cross scanning beams, hole detection, smoothing (pre-filtering) function, on/off time delay, one-shot timer, blanking function. The series allows each beam to be individually monitored, which may be used for a wide range of geometrical analysis functions.

The test input in the SST may be used for either disabling or enabling the transmitting power temporarily for test purposes.

The advanced automatic sensitivity adjustment, in Auto Long and Auto Short range mode, ensures that no set up or adjustments are required. The signal level of each individual channel is adjusted automatically, which compensates for misalignment and contamination during operation. The transmitter and receiver are electrically synchronised by wire connection. The system is intended for static applications.

Both the transmitter and receiver units are protected against reverse polarity of power supplies, test input and output signals. The output is also protected against short circuit and inductive loads.

| Technical Data                           |  |                                  |             |            |                                  |                                                  |
|------------------------------------------|--|----------------------------------|-------------|------------|----------------------------------|--------------------------------------------------|
|                                          |  | SST                              |             |            | SSR                              |                                                  |
| Supply voltage                           |  | 12-30 V dc                       |             |            |                                  |                                                  |
| Current consumption                      |  | 100 mA                           |             |            | 50 mA                            |                                                  |
| Output (Q <sub>1</sub> )                 |  | -                                |             |            | Push / Pull                      |                                                  |
| Output rating                            |  | -                                |             |            | 100 mA                           |                                                  |
| Short circuit protected                  |  | -                                |             |            | Yes                              |                                                  |
| Reverse polarity protected               |  | -                                |             |            | Yes                              |                                                  |
| Light source                             |  | Infrared (880 nm)                |             |            | -                                |                                                  |
| Channel spacing                          |  | 5 mm                             | 10 mm       | 20 mm      | 5 mm                             | 10 mm 20 mm                                      |
| Number of channels (diodes per detector) |  | 16 ... 384                       | 8 ... 192   | 4 ... 96   | 16 ... 384                       | 8 ... 192 4 ... 96                               |
| Number of beams                          |  | Parallel                         | 16 ... 384  | 8 ... 192  | 4 ... 96                         | 16 ... 384 8 ... 192 4 ... 96                    |
|                                          |  | Cross                            | 46 ... 1150 | 22 ... 574 | 10 ... 286                       | 46 ... 1150 22 ... 574 10 ... 286                |
| Active length                            |  | 65 ... 1920 mm                   |             |            |                                  |                                                  |
| Housing length                           |  | 160 ... 1980 mm                  |             |            |                                  |                                                  |
| Max. response time                       |  | Parallel / Cross                 | -           |            |                                  | (N x 120 µs) + 2 ms                              |
|                                          |  | Parallel                         | -           |            |                                  | 6,6 ... 48,1 ms 6,6 ... 25,0 ms 6,6 ... 13,5 ms  |
|                                          |  | Cross                            | -           |            |                                  | 6,6 ... 140,0 ms 6,6 ... 70,9 ms 6,6 ... 36,3 ms |
| Power on indicator                       |  | Green LED                        |             |            |                                  |                                                  |
| Output indicator                         |  | -                                |             |            | Yellow LED                       |                                                  |
| System status indicator                  |  | -                                |             |            | Red LED                          |                                                  |
| Blanking function                        |  | -                                |             |            | Configurable                     |                                                  |
| Housing dimensions (w x d)               |  | 33 x 36 mm                       |             |            |                                  |                                                  |
| Housing material                         |  | Aluminium (black anodised)       |             |            |                                  |                                                  |
|                                          |  | CoPET                            |             |            |                                  |                                                  |
| Connection Cable, PVC Ø 5,9 mm           |  | 0,5 m cable with 5 pin, M12 plug |             |            | 0,5 m cable with 5 pin, M12 plug |                                                  |

Note: "N" is equal to the number of beams (parallel or crossed).





















