



# SH4 Advanced

957920202

SH4-30-2250-A-12

TYPE 4 SAFETY LIGHT CURTAIN FULLY PROGRAMMABLE  
WITH SH4 DESIGNER WITH WI-FI

## OVERVIEW

- Hand protection (30 mm)
- Improved operating range: 20 m
- Basic functions: alignment, automatic restart
- Standard functions: manual restart, EDM
- Standard Muting functions: 2-signals mono and bidirectional muting, override
- Advanced functions: partial muting, dynamic partial muting, 4-signals muting, reduced resolution, multiple fixed or floating blanking zones
- Innovative wireless monitoring and configuration system
- Extended monitored height up to 2250 mm
- Compact profile (35 x 40 mm), common to all SH4 line
- Installation eased by LEDs indications of beam intensity
- Optical synchronization with 2 beams
- IP67 Protection
- -30 ... +55 °C Operating temperature
- Zero dead zone
- Simultaneous muting and blanking
- Complete couple and angular bracket included in the package
- Anti-interference codes
- Alignment eased by integrated laser
- Integrated LED muting indication
- Muting accessories available with prewired and preinstalled muting sensors
- Cascadable with SH4 CASCADE up to three units
- Pigtailed with M12 connectors with standard not shielded cables

## TECHNICAL FEATURES

Detection properties

|                          |                      |
|--------------------------|----------------------|
| Nominal sensing distance | 0.2 ... 20 m         |
| Resolution               | 30 mm                |
| controlled height        | 2250 mm              |
| number of rays           | 90                   |
| Effective Aperture Angle | $\leq \pm 2.5^\circ$ |

### Application

|                     |                                                                                                                                                   |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Function Principle  | Emitter + Receiver                                                                                                                                |
| Available functions | Manual/Automatic Restart, EDM, L/T 2-signals Muting, T 4-signals Muting, Partial Muting, Muting Filter, Override, Blanking, Wi-fi programmability |
| Description         | Compact no-dead-zone ADVANCED Wi-Fi Programmable                                                                                                  |
| Muting lamp output  | Incandescent lamp or LED                                                                                                                          |
| Functions           | Finger protection res. 30 mm Wi-Fi programmable                                                                                                   |

### Safety parameters

|       |                                   |
|-------|-----------------------------------|
| Type  | Type 4 safety light curtain (A/M) |
| SIL   | 3                                 |
| SILCL | 3                                 |
| PL    | e                                 |
| MTTFd | 43 years                          |
| SFF   | 99,50%                            |

## Outputs

|             |                                          |
|-------------|------------------------------------------|
| Output type | 2 x PNP-NO (OSSD safety output) with EDM |
|-------------|------------------------------------------|

|               |       |
|---------------|-------|
| Response time | 17 ms |
|---------------|-------|

## Electrical data

|                   |                  |
|-------------------|------------------|
| Operating Voltage | 24 Vdc $\pm$ 20% |
|-------------------|------------------|

|              |                          |
|--------------|--------------------------|
| Load current | $\leq$ 250mA each output |
|--------------|--------------------------|

|          |                                  |
|----------|----------------------------------|
| Emission | Infrared LED (850 nm wavelength) |
|----------|----------------------------------|

|                                |                          |
|--------------------------------|--------------------------|
| Interference to external light | According to IEC 61496-2 |
|--------------------------------|--------------------------|

|                              |                     |
|------------------------------|---------------------|
| Power Consumption - Receiver | $\leq$ 4W (no load) |
|------------------------------|---------------------|

|                             |             |
|-----------------------------|-------------|
| Power Consumption - Emitter | $\leq$ 3,5W |
|-----------------------------|-------------|

|                 |                  |
|-----------------|------------------|
| Capacitive Load | $\leq$ 1 $\mu$ F |
|-----------------|------------------|

|                                    |             |
|------------------------------------|-------------|
| Cabel Length (Power Supply/Output) | $\leq$ 30 m |
|------------------------------------|-------------|

|                                                |             |
|------------------------------------------------|-------------|
| Cable Length for Master Slave Interconnections | $\leq$ 10 m |
|------------------------------------------------|-------------|

## Mechanical data

|          |                                                    |
|----------|----------------------------------------------------|
| Material | Painted aluminum / MAKROLON AR 7099 Clear PC / PBT |
|----------|----------------------------------------------------|

|             |                                                               |
|-------------|---------------------------------------------------------------|
| Connections | M12-5 poles pigtail (emitter) M12-12 poles pigtail (receiver) |
|-------------|---------------------------------------------------------------|

|                     |               |
|---------------------|---------------|
| Storage temperature | -30 ...+70 °C |
|---------------------|---------------|

|            |                                                                                 |
|------------|---------------------------------------------------------------------------------|
| Vibrations | 10 mm / 3 g, 5 ... 150 Hz frequency (EN 60068-2-6 / Class 3M7 IEC TR 60721-4-3) |
|------------|---------------------------------------------------------------------------------|

|        |                                                                |
|--------|----------------------------------------------------------------|
| Shocks | 25 g x 6 ms x 600 (EN 60068-2-27 / Class 3M7 IEC TR 60721-4-3) |
|--------|----------------------------------------------------------------|

Test/Approvals

|                       |                                                                                                                                              |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Approvals             | CE, cULus, TÜV, UKCA                                                                                                                         |
| EMC compatibility     | According to 2014/30/EU Directive                                                                                                            |
| Shocks and vibrations | 10 mm / 3g, 5 to 150 Hz frequency (EN 60068-2-6 / Class 3M7 IEC TR 60721-4-3); 25g x 6 ms x 600 (EN 60068-2-27 / Class 3M7 IEC TR 60721-4-3) |

Accessories

|                                      |                                                  |
|--------------------------------------|--------------------------------------------------|
| Supplied Accessories                 | Standard "L" Mounting Brackets: 6 pcs kit        |
| Accessories to be ordered separately | Top-bottom rotating mounting bracket ST-K4ROT-SH |

Generical Data

|                       |                               |
|-----------------------|-------------------------------|
| Integrated aimer      | Integrated laser pointer      |
| Network Interface     | Wi-Fi Ethernet TCP/IP         |
| Dimensions            | 35x40x2259 mm                 |
| Operating Temperature | -30...+55°C                   |
| Humidity              | 15 ... 95 % (no condensation) |
| Mechanical Protection | IP65, IP 67 (EN 60529)        |

UNASSIGNED

|                |          |
|----------------|----------|
| Disegno 2D PDF | 2,62E-08 |
|----------------|----------|

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