



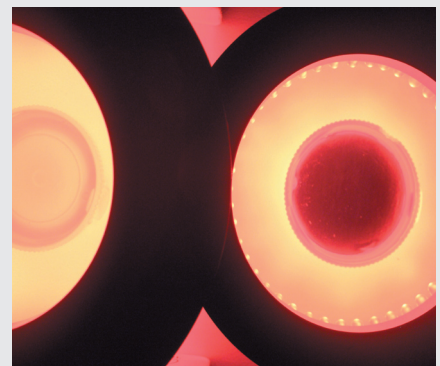
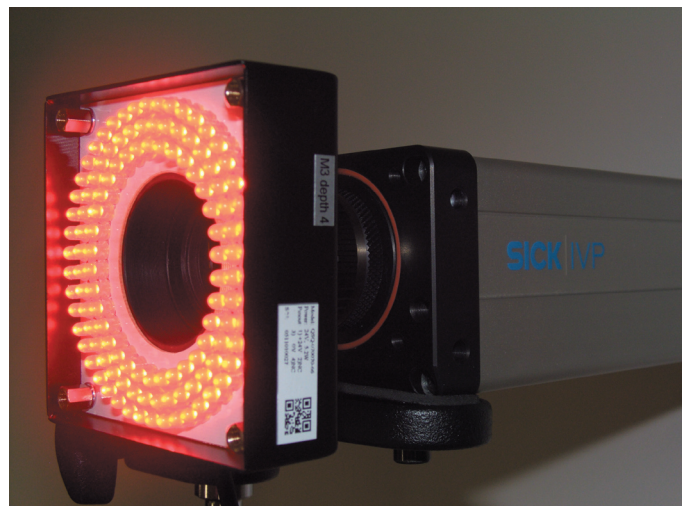
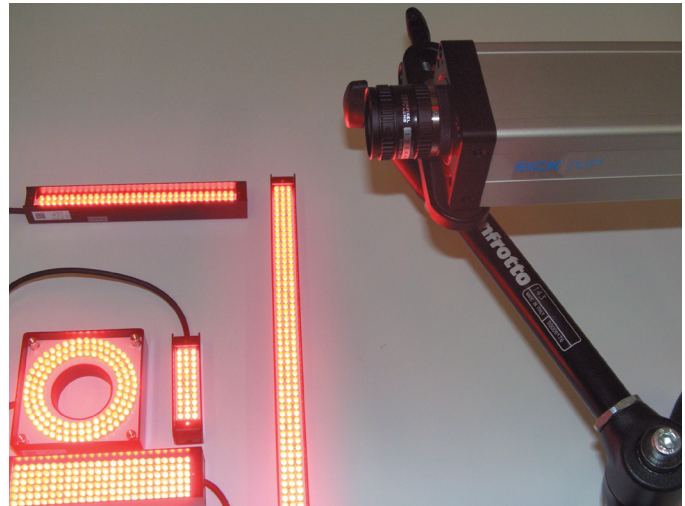
# Machine Vision Lighting QL Series

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# Machine Vision Lighting - QL Series

High performance LED lighting is the key to success for many machine vision applications. That's why SICK is pleased to offer a broad range of new machine vision lighting products - the QL Series from CCS America. This product line offers a variety of solutions that are compatible with SICK's innovative line of vision cameras. Now it is easier to get a complete lighting solution from one supplier. Whether you need a bar light or a high intensity spotlight, you will find it at SICK. With off-the-shelf delivery, we are able to provide you solutions quickly and at a competitive price.

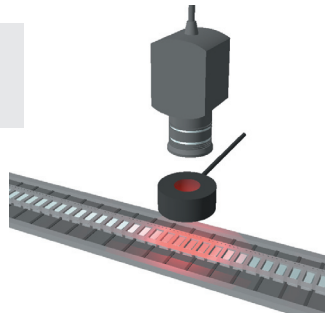


# QL Series

## Direct Ring Lights

### FEATURES

- High intensity
- 24 volt input
- Industry standard rugged cables
- Compact size
- Value priced
- All QL Series lights come standard with Flying Leads



### TECHNICAL DATA

#### Wavelengths

660 nm RED

#### Operating Conditions

Temperature: 0 - 40 °C

Humidity: 20 - 85%RH (non-condensing)

#### Average Lifetime Expectancy

Over 30,000 hours until 50% drop in maximum intensity based on continuous operation with 50% intensity at 25 °C. Using lower intensity, light on-off control, strobing, additional heat sinking, or heat removal can increase lifetime and intensity stability.

#### Environmental or Robustness Standard

No IP ratings have been certified for the QL lights. Dust, strong blows to their bodies, light blows to the LEDs themselves, or any form of liquid would be damaging.

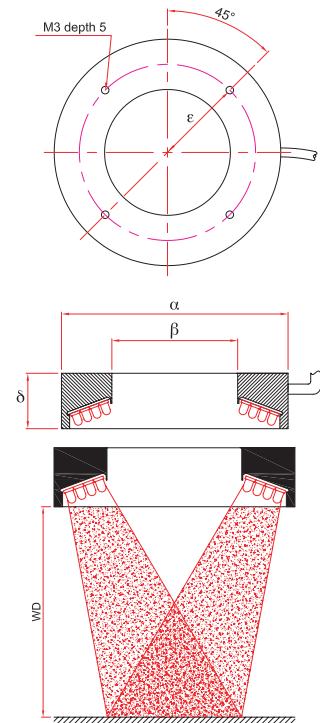
### ORDERING INFORMATION

Part Number	Description	$\alpha$	$\beta$	$\delta$	$\epsilon$	DC Power	Weight	ELA	WD
7123613	Ring Light, Red	32	10	15	10	24 V, 1.8 W	20 g	17	6 - 72
7123614	Ring Light, Red	50	28	18	20	24 V, 3.0 W	35 g	34	30 - 300
7123615	Ring Light, Red	90	50	22	35	24 V, 10.8 W	140 g	50	36 - 210

ELA= Effective Lighting Area

WD= Working Distance

All measurements are in mm.



# QL Series Square Ring Lights

## FEATURES

- High intensity
- 24 volt input
- Industry standard rugged cables
- Compact size
- Value priced
- All QL Series lights come standard with Flying Leads

## TECHNICAL DATA

### Wavelengths

660 nm RED, WHITE, 950 nm IR

### Operating Conditions

Temperature: 0 - 40 °C

Humidity: 20 - 85%RH (non-condensing)

### Average Lifetime Expectancy

Over 30,000 hours until 50% drop in maximum intensity based on continuous operation with 50% intensity at 25 °C. Using lower intensity, light on-off control, strobing, additional heat sinking, or heat removal can increase lifetime and intensity stability.

### Environmental or Robustness Standard

No IP ratings have been certified for the QL lights. Dust, strong blows to their bodies, light blows to the LEDs themselves, or any form of liquid would be damaging.

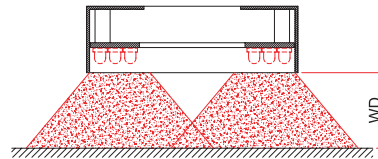
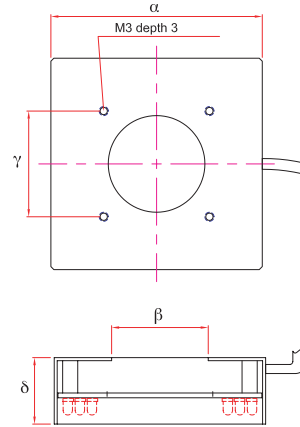
## ORDERING INFORMATION

Part Number	Description	$\alpha$	$\beta$	$\gamma$	$\delta$	DC Power	Weight	ELA	WD
7123609	Square Ring Light, Red	56	32	38	22	24 V, 3.0 W	80 g	80	72 - 300
7123610	Square Ring Light, Red	70	32	35	22	24 V, 6.0 W	120 g	76	14 - 100
7123611	Square Ring Light, White	70	32	35	22	24 V, 8.2 W	120 g	76	14 - 100
7123612	Square Ring Light, IR	70	32	35	22	24 V, 10.0 W	120 g	76	14 - 100

ELA= Effective Lighting Area

WD= Working Distance

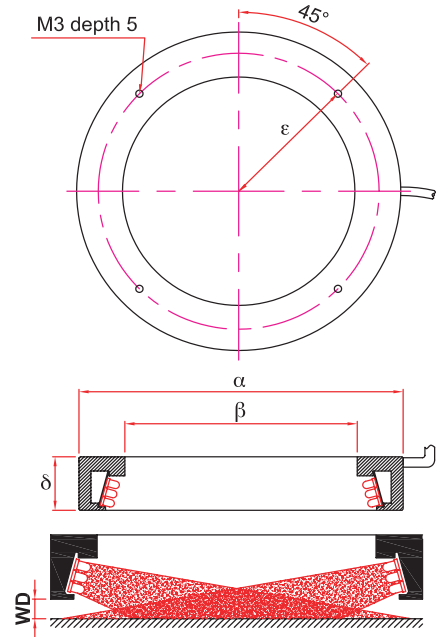
All measurements are in mm.



# QL Series Low Angle Lights

## FEATURES

- High intensity
- 24 volt input
- Industry standard rugged cables
- Compact size
- Value priced
- All QL Series lights come standard with Flying Leads



## TECHNICAL DATA

### Wavelengths

660 nm RED

### Operating Conditions

Temperature: 0 - 40 °C

Humidity: 20 - 85%RH (non-condensing)

### Average Lifetime Expectancy

Over 30,000 hours until 50% drop in maximum intensity based on continuous operation with 50% intensity at 25° C. Using lower intensity, light on-off control, strobing, additional heat sinking, or heat removal can increase lifetime and intensity stability.

### Environmental or Robustness Standard

No IP ratings have been certified for the QL lights. Dust, strong blows to their bodies, light blows to the LEDs themselves, or any form of liquid would be damaging.

## ORDERING INFORMATION

Part Number	Description	α	β	δ	ε	DC Power	Weight	ELA	WD
7123624	Low Angle Ring Light, Red	74	50	19	60	24 V, 5.4 W	70 g	34	1 - 23
7123625	Low Angle Ring Light, Red	134	96	22.5	116	24 V, 12.6 W	260 g	84	1 - 23
7123626	Low Angle Ring Light, Red	208	172	22	186	24 V, 21.6 W	300 g	109	14 - 66

ELA= Effective Lighting Area

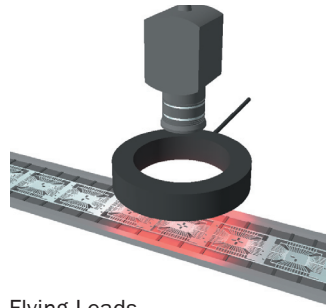
WD= Working Distance

All measurements are in mm.

# QL Series Dark Field Lights

## FEATURES

- High intensity
- 24 volt input
- Industry standard rugged cables
- Compact size
- Value priced
- All QL Series lights come standard with Flying Leads



## TECHNICAL DATA

### Wavelengths

660 nm RED

### Operating Conditions

Temperature: 0 - 40 °C

Humidity: 20 - 85%RH (non-condensing)

### Average Lifetime Expectancy

Over 30,000 hours until 50% drop in maximum intensity based on continuous operation with 50% intensity at 25 °C. Using lower intensity, light on-off control, strobing, additional heat sinking, or heat removal can increase lifetime and intensity stability.

### Environmental or Robustness Standard

No IP ratings have been certified for the QL lights. Dust, strong blows to their bodies, light blows to the LEDs themselves, or any form of liquid would be damaging.

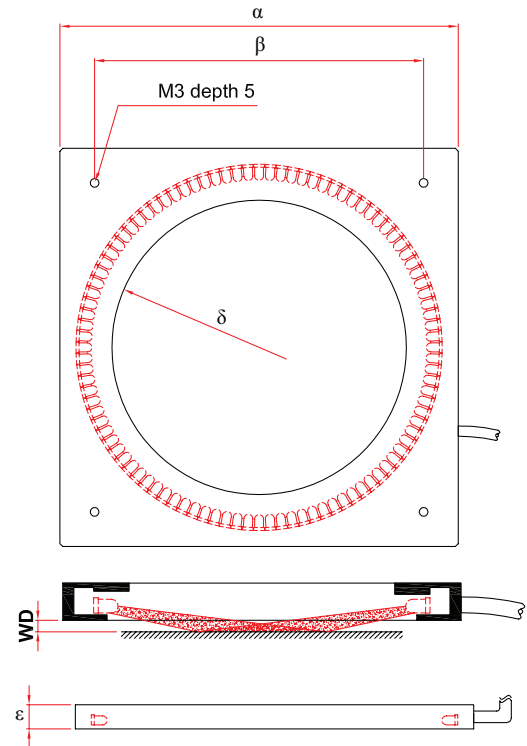
## ORDERING INFORMATION

Part Number	Description	$\alpha$	$\beta$	$\delta$	$\epsilon$	DC Power	Weight	ELA	WD
7123627	Dark Field Ring Light, Red	75	60	45	8.4	24 V, 3.0 W	80 g	20	2 - 8
7123628	Dark Field Ring Light, Red	90	70	60	8.4	24 V, 3.0 W	100 g	29	1 - 10
7123629	Dark Field Ring Light, Red	138	114	102	8.4	24 V, 6.0 W	180 g	43	3 - 10

ELA= Effective Lighting Area

WD= Working Distance

All measurements are in mm.



# QL Series Direct Bar Lights

## FEATURES

- High intensity
- 24 volt input
- Industry standard rugged cables
- Compact size
- Value priced
- All QL Series lights come standard with Flying Leads

## TECHNICAL DATA

### Wavelengths

660 nm RED, WHITE, 470 nm BLUE, 915 nm IR

### Operating Conditions

Temperature: 0 - 40 °C

Humidity: 20 - 85%RH (non-condensing)

### Average Lifetime Expectancy

Over 30,000 hours until 50% drop in maximum intensity based on continuous operation with 50% intensity at 25 °C. Using lower intensity, light on-off control, strobing, additional heat sinking, or heat removal can increase life-time and intensity stability.

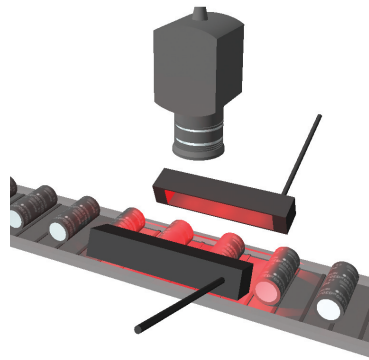
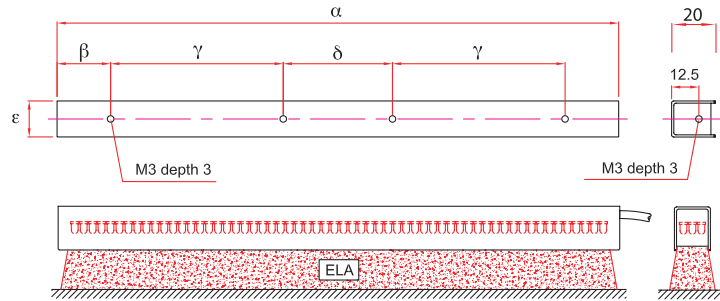
### Environmental or Robustness Standard

No IP ratings have been certified for the QL lights. Dust, strong blows to their bodies, light blows to the LEDs themselves, or any form of liquid would be damaging.

## ORDERING INFORMATION

Part Number	Description	$\alpha$	$\beta$	$\gamma$	$\delta$	$\epsilon$	DC Power	Weight	ELA
7123616	Bar Light, Red	61	15	0	31	16.5	24 V, 1.8 W	50 g	46 x 14
7123617	Bar Light, Red	109	15	0	79	28.5	24 V, 7.2 W	70 g	95 x 26
7123618	Bar Light, Red	109	15	0	79	16.5	24 V, 3.6 W	70 g	95 x 14
7123619	Bar Light, Red	257	24.5	79	50	16.5	24 V, 9.0 W	160 g	242 x 14
7125236	Bar Light, Red	144	47	0	50	28.5	24 V, 12.8 W	165 g	130 x 26
7123620	Bar Light, Red	144	47	0	50	16.5	24 V, 4.8 W	110 g	130 x 14
7123622	Bar Light, White	61	15	0	31	16.5	24 V, 2.5 W	50 g	46 x 14
7123623	Bar Light, White	109	15	0	79	28.5	24 V, 7.2 W	70 g	95 x 26
7123621	Bar Light, White	144	47	0	50	16.5	24 V, 6.6 W	110 g	130 x 14
7125237	Bar Light, Blue	61	15	0	31	16.5	24 V, 2.9 W	50 g	46 x 14
7125238	Bar Light, IR	109	15	0	79	28.5	24 V, 9.6 W	105 g	95 x 26
7125239	Bar Light, IR	109	15	0	79	16.5	24 V, 4.8 W	70 g	95 x 14
7125240	Bar Light, IR	144	47	0	50	16.5	24 V, 2.7 W	110 g	130 x 14

ELA= Effective Lighting Area  
All measurements are in mm.





# QL Series On-Axis Lights

## FEATURES

- High intensity
- 24 volt input
- Industry standard rugged cables
- Compact size
- Value priced
- All QL Series lights come standard with Flying Leads

## TECHNICAL DATA

### Wavelengths

660 nm RED

### Operating Conditions

Temperature: 0 - 40 °C

Humidity: 20 - 85%RH (non-condensing)

### Average Lifetime Expectancy

Over 30,000 hours until 50% drop in maximum intensity based on continuous operation with 50% intensity at 25 °C. Using lower intensity, light on-off control, strobing, additional heat sinking, or heat removal can increase lifetime and intensity stability.

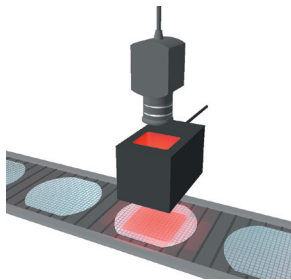
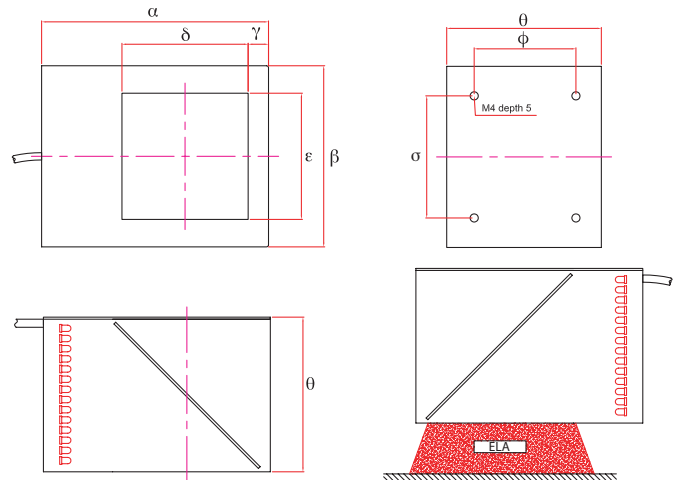
### Environmental or Robustness Standard

No IP ratings have been certified for the QL lights. Dust, strong blows to their bodies, light blows to the LEDs themselves, or any form of liquid would be damaging.

## ORDERING INFORMATION

Part Number	Description	$\alpha$	$\beta$	$\delta$	$\gamma$	$\epsilon$	$\theta$	$\phi$	$\sigma$	DC Power	Weight	ELA
7125241	On-Axis Light, Red	46.5	46	26	5	28	41	20	40	24 V, 2.6 W	150 g	34 x 31 at 5 mm WD
7123630	On-Axis Light, Red	91	65	44	8	42	56.5	32	40	24 V, 7.2 W	280 g	52 x 50 at 5 mm WD
7123631	On-Axis Light, Red	111.5	89	62	10	62	76	50	60	24 V, 12.6 W	470 g	73 x 70 at 5 mm WD

ELA= Effective Lighting Area for one specific Working Distance. WD is free.  
All measurements are in mm.



# QL Series Backlights

## FEATURES

- High intensity
- 24 volt input
- Industry standard rugged cables
- Compact size
- Value priced
- All QL Series lights come standard with Flying Leads

## TECHNICAL DATA

### Wavelengths

660 nm RED

### Operating Conditions

Temperature: 0 - 40 °C

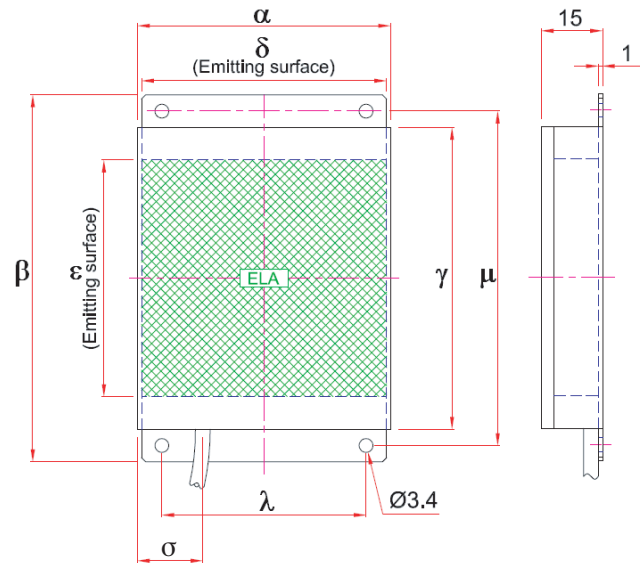
Humidity: 20 - 85%RH (non-condensing)

### Average Lifetime Expectancy

Over 30,000 hours until 50% drop in maximum intensity based on continuous operation with 50% intensity at 25 °C. Using lower intensity, light on-off control, strobing, additional heat sinking, or heat removal can increase lifetime and intensity stability.

### Environmental or Robustness Standard

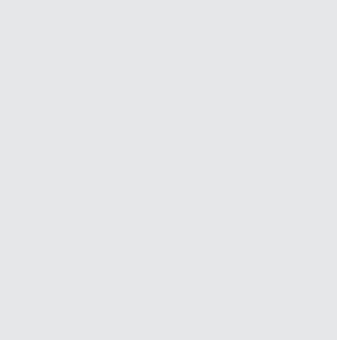
No IP ratings have been certified for the QL lights. Dust, strong blows to their bodies, light blows to the LEDs themselves, or any form of liquid would be damaging.



## ORDERING INFORMATION

Part Number	Description	$\alpha$	$\beta$	$\delta$	$\gamma$	$\epsilon$	$\lambda$	$\mu$	$\sigma$	DC Power	Weight	ELA
7125250	Backlight, Red	32	52	30	44	28	20	0	16	24 V, 1.8 W	50 g	30 x 28
7125251	Backlight, Red	62	90	60	74	58	50	82	16	24 V, 7.2 W	110 g	60 x 58
7125252	Backlight, Red	122	154	120	134	118	66	145	46	24 V, 23.1 W	310 g	120 x 118

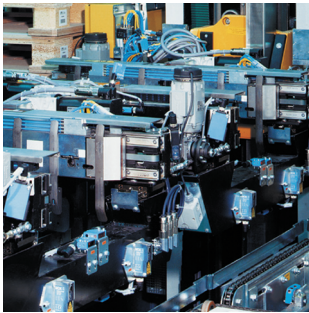
ELA= Effective Lighting Area.  
All measurements are in mm.



## RANGE OF EXPERTISE

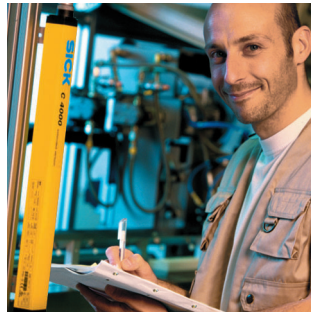
### INDUSTRIAL SENSORS

SICK is one of the world's leading manufacturers of sensors, safety systems, and automatic identification products for industrial applications. SICK holds more than 450 patents for its innovative products. Through its Industrial Sensors, Safety Systems, Automatic Identification, and Environmental and Process Analysis divisions, the company has operations in 65 countries. SICK North America is headquartered in Minneapolis, MN.



### SAFETY SYSTEMS

Products from SICK provide comprehensive safeguarding of both workers and machinery. As experts in sensor technology, SICK develops and manufactures pioneering products that provide protection in hazardous zones, dangerous locations and for safeguarding access points. By providing services, which encompass all aspects of machine safety and security, SICK is setting new standards in safety technology.



### AUTOMATIC IDENTIFICATION

Our wide range of sensors provides solutions to suit any application in the field of automation. Even under rugged ambient conditions, objects are reliably detected, counted and positioned regardless of their form, location and surface finish.



### ANALYZERS AND PROCESS INSTRUMENTATION

Whether the tasks involve identification, handling, classification or volume measurement, innovative automatic identification systems and laser measurement systems from SICK function reliably, even under rapid cycle times. Products from SICK conform to the latest standards and can be easily integrated in all industrial environments and external applications.



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