

Интеллектуальные датчики зрения IVS/DCR 1048i

Технические характеристики

По вопросам продаж и поддержки обращайтесь:

Алматы (727)345-47-04
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35

Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +(727)345-47-04

Беларусь +(375)257-127-884

Узбекистан +998(71)205-18-59

Киргизия +996(312)96-26-47

эл.почта: ezu@nt-rt.ru || сайт: <https://leuze.nt-rt.ru/>

Simple vision sensors for presence detection, measuring, counting, code reading, print verification

Highly flexible and efficient for various applications.

The IVS/DCR 1048i intelligent vision sensor provides a compact, versatile and powerful device with image processing functions for identification and inspection tasks. Available in various models with two different resolutions for maximum flexibility.



Allrounder for detection, identification and inspection:

The IVS 1048i / DCR 1048i series' new Simple Vision sensors

The Simple Vision sensors of the IVS 1048i and DCR 1048i series are compact, versatile and high-performance devices with image processing functions for detection, identification and inspection. A wide variety of models with two different resolutions ensures maximum flexibility.

With powerful image processing tools, easy-to-configure software, interchangeable lenses and integrated high-performance LED illumination, the new Simple Vision sensors from Leuze offer outstanding performance and a high level of efficiency.

Advantages for you

- Outstanding product performance for detection, identification and inspection tasks
- Different models with two different resolutions available
- High-performance image processing tools and a user-friendly, graphical interface for fast setup and smooth operation
- Integrated digital interfaces TCP/IP, PROFINET, FTP or SFTP
- Exchangeable lenses for flexibility in terms of distance, field of vision and resolution
- Integrated, switchable high-performance LED illumination in white and red for an optimum, high-contrast image
- Filter caps for challenging tasks, e.g. quality checks, involving highly reflective objects or under changing ambient light conditions
- Compact housing enables integration into almost all system concepts, even in confined installation situations
- Protected by an IP67 housing, the Vision sensor also works reliably in harsh production environments

Our flexible selection of models provides various device options for different tasks and budgets:

DCR 1048i

The high-performance code-reading algorithm ensures extremely high reading rates. This model has an optional improved algorithm specifically for DPM codes:

- 1D / 2D code reading
- DPM code reading
- Print quality verification (OCV)

[Link to item list DCR 1048i](#)

IVS 1048i

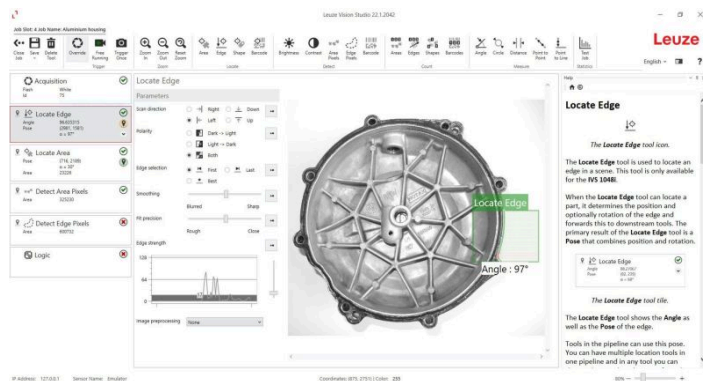
The allrounder model enables detection, inspection and identification with just one device. Furthermore, models with two different resolutions are also available.

- Presence detection
- 1D / 2D code reading
- Measuring and counting
- Allrounder for identification and inspection

[Link to item list IVS 1048i](#)

Highlights

Fast commissioning and versatile applications



The Leuze Vision Studio software offers powerful tools and statistics for image processing and inspection that can also be used offline. To reduce costs and save time, the sensors can be set up by the user without special training or specialist knowledge. The Simple Vision sensors can be used for a wide variety of industrial tasks:

- Position checking for controlling handling systems or a tool to correct the travel position
- Identification of a part using markings, its shape or other features
- Checking a part for correct production or correct mounting
- Measurement and counting of parts
- Checking of parts for defects

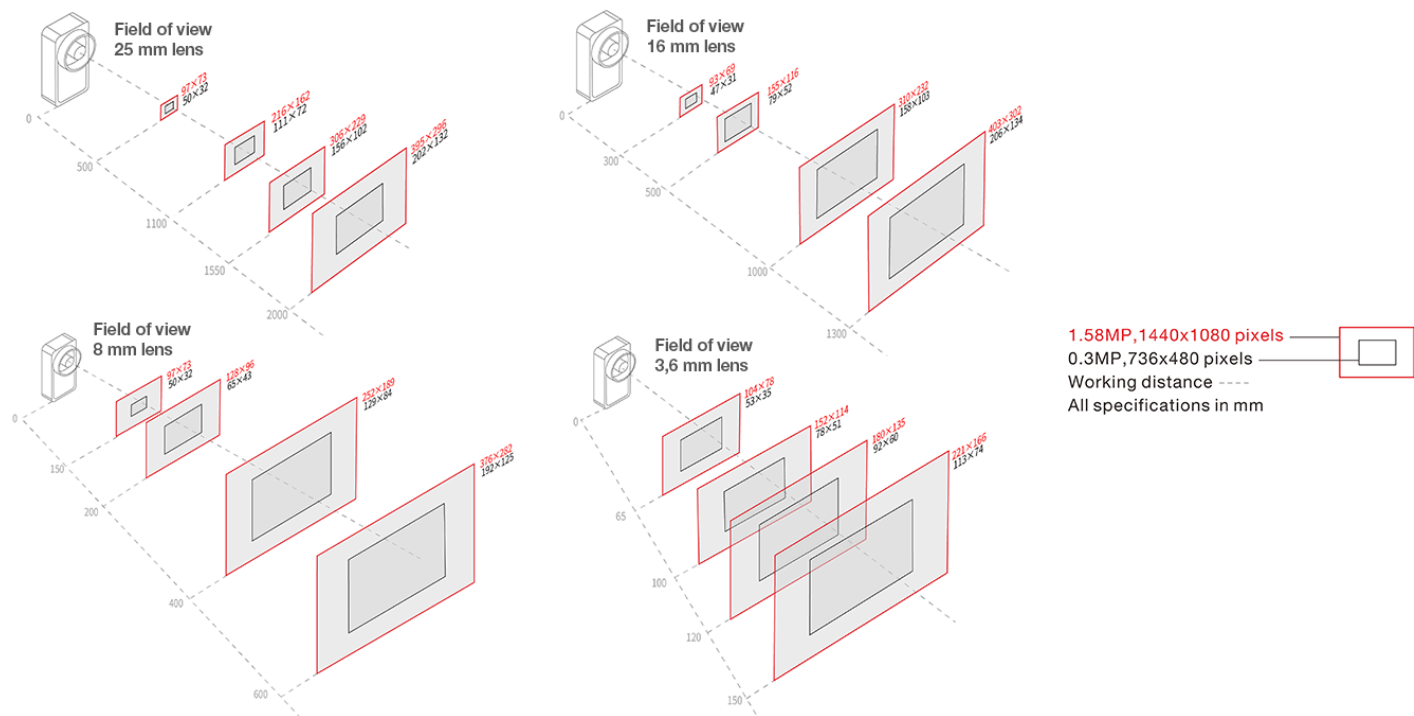
Support of common industrial protocols



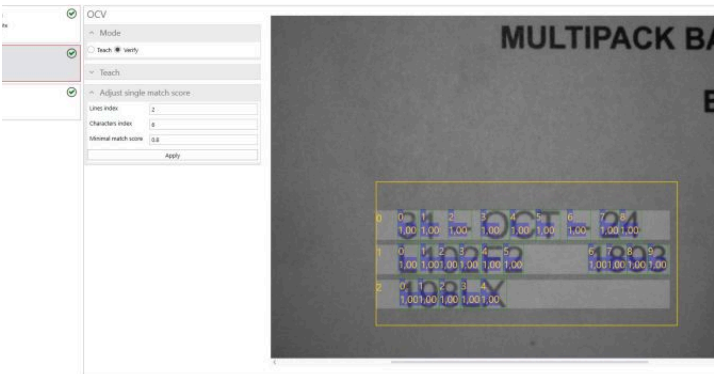
Common interface protocols such as TCP/IP, PROFINET, FTP and also SFTP (Secure File Transfer Protocol) are supported. This makes communication and data acquisition easy. Digital inputs and outputs are also provided to allow simple processes to be controlled directly or to enable connection to a PLC.

Exchangeable lenses for flexibility

Thanks to four interchangeable S-Mount lenses with variable focus adjustment and two different apertures, the IVS 1048i / DCR 1048i image processing sensors provide a high degree of flexibility in terms of reading distance, field of vision, resolution and depth of field.



Optical Character Verification (OCV)



The DCR 1048i OCV can read 1D/2D codes within an application and check the print quality of an imprint (best before date, batch, lot, etc.). No complex set-up with many parameters is required. The sensor only needs to be taught a reference image of the imprint. Faulty prints due to clogged print heads, used ink or adhesion problems can be recognized during the ongoing process. The defective products can be ejected at an early stage.

Application



IVS 1048i: Quality check during labeling process

Requirement:

On a packaging line, a label is to be affixed to the primary packaging. The label must be attached correctly before the product is inserted into the secondary packaging.

Solution:

With its variable field of vision and large operating range, the new IVS 1048i can easily locate and measure the label and check whether or not it has been attached correctly.



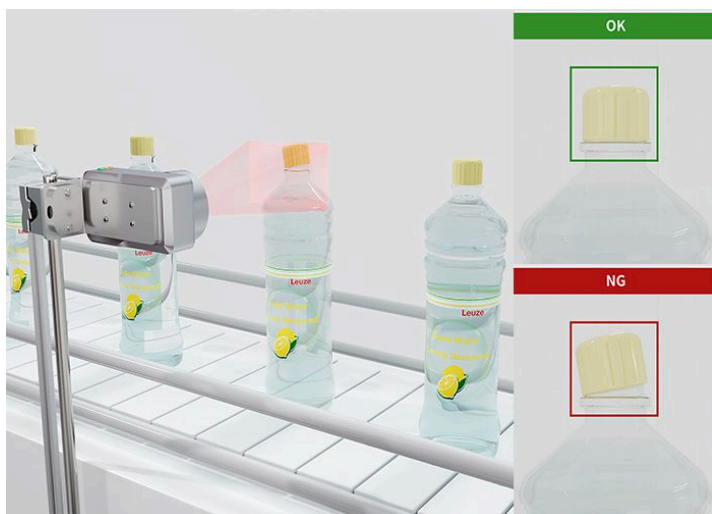
IVS 1048i: Adhesive detection during the sealing of secondary packaging

Requirement:

If adhesive is used for sealing secondary packaging, it must be ensured that the adhesive has been applied correctly before the carton is sealed.

Solution:

The IVS 1048i can detect and count the adhesive beads or measure their length and is therefore ideally suited for such applications.



IVS 1048i: Quality check during sealing in beverage filling processes

Requirement:

In a beverage filling system, it must be checked whether the bottle caps are correctly sealed.

Solution:

With its extensive tool set, the new IVS 1048i Simple Vision sensor can determine whether the bottle cap is sealed correctly.



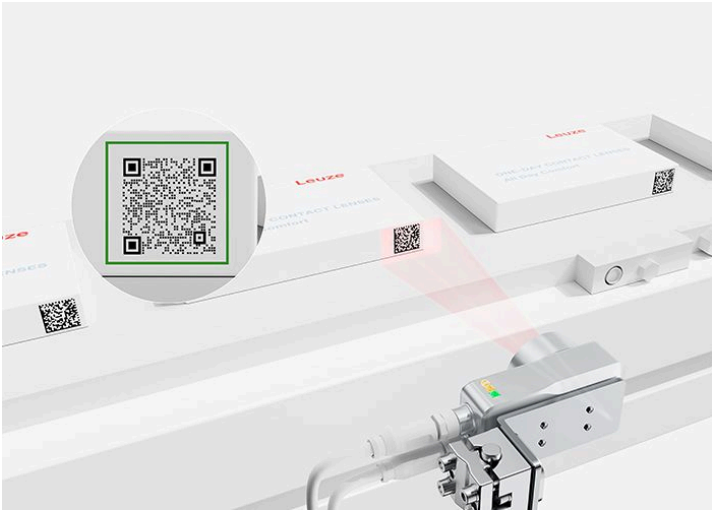
DCR 1048i: Simultaneous reading of multiple 1D and 2D codes

Requirement:

A secondary packaging has both a 1D code and a 2D code. For quality assurance purposes, the codes are to be scanned before a pack of 5 is packed into a carton. During the process, the codes are to be identified simultaneously with a single scan irrespective of the code type.

Solution:

The new DCR 1048i can easily read either single 1D and 2D codes or any number of 1D and 2D codes simultaneously using multicode decoding.



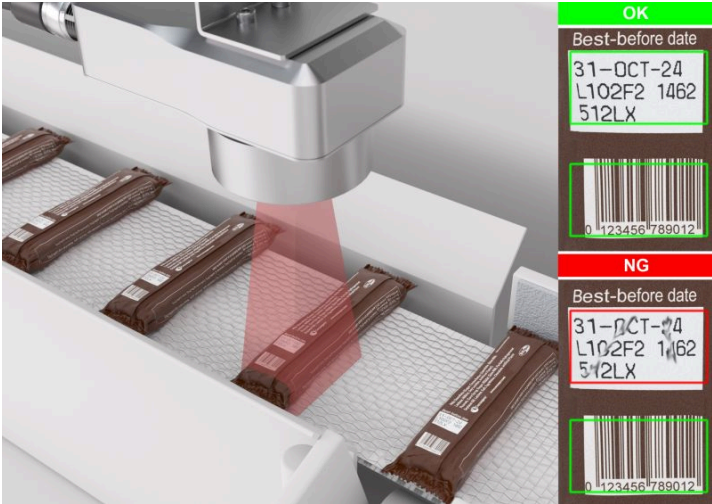
DCR 1048i: Reading of codes printed directly on packaging material

Requirement:

A 2D code is printed directly on secondary packaging. The decoding of these so-called DPM codes is essential for the traceability of the products.

Solution:

The DCR 1048i DPM Simple Vision sensor has an optimized reading algorithm which is specially designed for decoding codes that are printed directly on packaging.



DCR 1048i: Label inspection with print quality verification (OCV)

Requirement:

A code, a best-before date and a batch number is affixed to packaging. The code must be detected and the imprint verified at the same time to ensure that the imprint is present, complete and legible.

Solution:

The DCR 1048i OCV can identify 1D/2D codes at the same time as comparing the imprint with a taught-in reference image and evaluates whether it meets the required quality (adjustable threshold value) or not.

Technical features

	DCR 1048i	DCR 1048i	DCR 1048i	IVS 1048i	IVS 1048i	IVS 1048i	IVS 1048i	IVS 1048i	IVS 1048i
	ADJ-8F4-	ADJ-8F4-	ADJ-8F4-	ADJ-8F4-	ADJ-8F4-	ADJ-8F4-	ADJ-8F4-	ADJ-8F4-	ADJ-8F4-
	102-M4	102-M4-	102-M4-	102-M4-	102-M4-	102-M4-	102-M1-	102-M1-	102-M1-
	102-M4	TDPM	TOCV	TPRD	TMEC	TALL	TPRD	TMEC	TALL
Detect (brightness, contrast, surface pixels, edge pixels)				•	•	•	•	•	•

Locate (surface, edge, form)				•	•	•	•	•	•
Count (surface, edge, form)					•	•		•	•
Measure (angle, circle, distance, point-to-point, point-to-line)					•	•		•	•
Detect barcodes	•	•	•			•			•
Locate barcodes	•	•	•			•			•
Count barcodes	•	•	•			•			•
Detect barcodes with DPM marking		•				•			
Locate barcodes with DPM marking		•				•			
Count barcodes with DPM marking		•				•			
Print quality verification (OCV)			•						

Optical data

Type	High resolution – M4; low resolution – M1
Imager	Sony Global Shutter
Optical format	1/2.9”
Resolution (H x V)	1,440 x 1,080 pixels; 736 x 480 pixels
Pixel size (µm)	3.45 x 3.45
Max. frame rate (fps)	30
Working range	50 - 2,000 mm, depending on optics
Lens	S-Mount, 4 focal lengths: 3.6, 8, 16, 25 mm
Aperture	All lenses with f/4 or f/8 aperture
Electrical data	
Power supply	18 30 VDC
Open-circuit current (max.)	1000 mA @24V
Internal illumination	Switchable internal illumination: high-power red or high-power white
Flash memory / number of jobs	16 GB / up to 255 jobs
Interfaces	Digital I/O, ethernet 100Mbit/s
Protocols	TCP/IP, FTP/SFTP, PROFINET
Digital input / output	2 + 1 external trigger / 4 + 1 ready signal; all push-pull; max. 150 mA load current
Image memory	Via FTP, SFTP / manually in Vision Studio software
Mechanical data	
Dimensions (H x W x D)	85 x 45 x 34 mm
Optics connection	S-mount
Optics cover	PMMA
Fastening	4x M3 thread



DCR 1048i ADJ-8F4-102-M4-TOCV

- Stationary 2D-code reader

Series: DCR 1048i, DCR 1048i

Software functions: Detect codes, Count codes, Locate codes, Printing ...

Code types, readable: Code 39, 2/5 Hong Kong, 2/5 IATA, 2/5 Interleaved,...



DCR 1048i ADJ-8F4-102-M4

- Stationary 2D-code reader

Series: DCR 1048i, DCR 1048i

Software functions: Reading of 1D codes, Count codes, Detect codes, Lo...

Code types, readable: Code 39, 2/5 Hong Kong, 2/5 IATA, 2/5 Interleaved,...



DCR 1048i ADJ-8F4-102-M4-TDPM

- Stationary 2D-code reader

Series: DCR 1048i, DCR 1048i

Software functions: Count codes, Detect codes, DPM (directly marked co...

Code types, readable: 2/5 Hong Kong, 2/5 IATA, 2/5 Interleaved, 2/5 Matr...



IVS 1048i ADJ-8F4-102-M4-TALL

- Vision sensor

Series: IVS 1048i

Software functions: Measuring: angle, circle, distance, point-to-point...

Code types, readable: Micro QR, 2/5 Hong Kong, 2/5 IATA, 2/5 Interleaved...



IVS 1048i ADJ-8F4-102-M1-TALL

- Vision sensor

Series: IVS 1048i

Software functions: Parts detection: brightness, contrast, surface pix...

Code types, readable: 2/5 Hong Kong, 2/5 IATA, 2/5 Interleaved, 2/5 Matr...



IVS 1048i ADJ-8F4-102-M4-TMEC

- Vision sensor

Series: IVS 1048i

Software functions: Counting: surfaces, edges, forms, Locate: surface,...



IVS 1048i ADJ-8F4-102-M1-TMEC

- Vision sensor

Series: IVS 1048i

Software functions: Parts detection: brightness, contrast, surface pix...



IVS 1048i ADJ-8F4-102-M4-TPRD

- Vision sensor

Series: IVS 1048i

Software functions: Locate: surface, edge, form, Parts detection: brig...



IVS 1048i ADJ-8F4-102-M1-TPRD

- Vision sensor

Series: IVS 1048i

Software functions: Locate: surface, edge, form, Parts detection: brig...

По вопросам продаж и поддержки обращайтесь:

Алматы (727)345-47-04
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35

Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +(727)345-47-04

Беларусь +(375)257-127-884

Узбекистан +998(71)205-18-59

Киргизия +996(312)96-26-47

эл.почта: ezu@nt-rt.ru || сайт: <https://leuze.nt-rt.ru/>