Poptávka

VS40

VS40-SR20M4-2C00W

- Rozlišení: 2,3 / 5,1 megapixelů
- Velikost pixelu: 3,0 / 2,2 µm
- Snímková frekvence: 60 / 30 snímků za sekundu
- Integrované ostření a osvětlení
- Krytí IP: IP65 a IP67



POPIS PRODUKTU

Chytrá kamera Zebra VS40 pro strojové vidění představuje komplexní řešení pro automatizaci výrobních a logistických procesů, které integruje pokročilé funkce do jednoho odolného zařízení. Jednotná softwarová platforma Zebra Aurora™ zjednodušuje nastavení, nasazení a správu pro začátečníky i experty a snižuje tak náklady i čas potřebný na školení. Klíčové inovace, jako je ImagePerfect+ pro pořízení až 16 různých snímků na jedno spuštění a napájení přes Ethernet (PoE), eliminují potřebu externího příslušenství a zvyšují spolehlivost inspekcí, což vede k výraznému snížení zmetkovitosti a zvýšení efektivity výroby.

Klíčové body:

- Zebra VS40 je chytrá kamera pro strojové vidění, která zvyšuje automatizaci a kvalitu výrobních procesů.
- Softwarová platforma Zebra Aurora™ sjednocuje ovládání všech pevných skenerů a kamer Zebra v intuitivním rozhraní.
- Funkce ImagePerfect+ umožňuje na jedno spuštění pořídit až 16 různých snímků, každý s unikátním nastavením.
- Díky podpoře napájení přes Ethernet (PoE) se snižuje složitost instalace a související náklady.
- Univerzální port USB-C poskytuje flexibilitu pro připojení dalšího příslušenství, jako jsou tiskárny, tablety nebo externí úložiště.
- Odolné hliníkové pouzdro s krytím IP65 a IP67 zaručuje spolehlivý provoz v náročných průmyslových podmínkách.
- Funkcionalitu kamery lze kdykoliv rozšířit pomocí jednoduchého upgradu softwarové licence.
- Nástroj Golden Image Compare umožňuje rychlou diagnostiku problémů porovnáním aktuálního snímku s referenčním „dokonalým“ obrazem.

SPECIFIKACE

Focus	Liquid lens
Interface out	Ethernet with POE, Serial, USB & Industrial Protocols
Lighting	Červená
Size	54.0 x 64.0 x 91.4
Software performance	STANDARD MV TOOLSET
Type of scanner	Smart Camera

Machine Vision (MV) Tools				
Tool	**Description**	**Sensor**	**Standard**	**Advanced**
Object Locate	Find high contrast features	•	•	•
Pixel Counter	Count pixels with a set/given grey level in a specific area	•	•	•
Brightness	Provide the average brightness for an area	•	•	•
Contrast	Provide the average contrast for an area	•	•	•
Edge Tool	Find edges for fixturing and presence/absence	•	•	•
Distance Tool	Measure the distance between two existing tool results	•	•	•
Advanced Pattern	Find challenging features		•	•
Blob	Find, sort and count areas of joined pixels with a similar grey level		•	•
Optical Character Verification (OCV)	Inspects the quality of text or logos		•	•
Find Circle	Find and measure circles		•	•
Caliper Tool	Find and measure the distance between two edges		•	•
Filters	Enhance image quality for more robust inspection		•	•
1D/2D/DPM	Read 1D, 2D and DPM barcodes		•	•
Deep Learning OCR	Deep Learning-based OCR			•
Footnotes				

1. Some features available in a future release. Contact your Zebra Partner or sales representative for more information.
2. Refer to Product Reference Guide for complete list of symbologies.
3. Printing resolution, contrast, power source, illumination source, and ambient light dependent

Specifications subject to change without notice.

Specifications

VS40-SR—30° FOV Lens

Symbology/Resolution	Near	Far
5 mil Code 128	3 in./8 cm	24 in./61 cm
10 mil Code 128	3 in./8 cm	49 in./124 cm
15 mil Code 128	3 in./8 cm	70 in./178 cm
20 mil Code 128	3 in./8 cm	92 in./234 cm
5 mil DataMatrix	3 in./8 cm	13 in./33 cm
10 mil DataMatrix	3 in./8 cm	28 in./71 cm
15 mil DataMatrix	3 in./8 cm	40 in./102 cm
30 mil DataMatrix	3 in./8 cm	78 in./198 cm

VS40-WA—46° FOV Lens

Symbology/Resolution	Near	Far
5 mil Code 128	3 in./8 cm	14 in./36 cm
10 mil Code 128	3 in./8 cm	30 in./76 cm
15 mil Code 128	3 in./8 cm	42 in./107 cm
20 mil Code 128	3 in./8 cm	56 in./142 cm
5 mil DataMatrix	3 in./8 cm	8 in./20 cm
10 mil DataMatrix	3 in./8 cm	18 in./46 cm
15 mil DataMatrix	3 in./8 cm	27 in./69 cm
30 mil DataMatrix	3 in./8 cm	52 in./132 cm

xS40 Connections

The xS40 supports connections for USB-C with DisplayPort, power serial and GPIO, x-coded Ethernet, and external lighting.

Figure: xS40 Connections



1	Power Serial and GPIO
2	USB-C (with DisplayPort)
3	External Lighting
4	X-Coded Ethernet Port

Ethernet Connector



Table: Ethernet Connector Pinout Diagram

Pin	Description
1	TP1+
2	TP1-
3	TP2+
4	TP2-
5	TP4+
6	TP4-
7	TP3-
8	TP3+
SHELL	SHIELD

External Light Connector

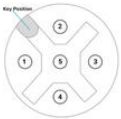


Table: External Light Connector Pinout Diagram

Pin	Color	Description
1	Brown	DC_OUT / GPIO8
2	White	GPIO7
3	Blue	GND
4	Black	GPIO6
5	Grey	ANALOG_OUT
SHELL	Bare	SHIELD

Power and IO Connector

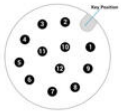


Table: Power and I/O Connector Pinout Diagram

Pin	Color	Description
1	Yellow	GPIO2
2	White/Yellow	TXD
3	Brown	RXD
4	White/Brown	GPIO4
5	Violet	GPIO5
6	White/Violet	COMMON_IN
7	Red	DC_IN
8	Black	GND
9	Green	COMMON_OUT
10	Orange	GPIO0
11	Blue	GPIO1
12	Grey	GPIO3
SHELL	Bare	SHIELD

Machine Vision (MV) Tools				
Tool	**Description**	**Sensor**	**Standard**	**Advanced**
Object Locate	Find high contrast features	•	•	•
Pixel Counter	Count pixels with a set/given grey level in a specific area	•	•	•
Brightness	Provide the average brightness for an area	•	•	•
Contrast	Provide the average contrast for an area	•	•	•
Edge Tool	Find edges for fixturing and presence/absence	•	•	•
Distance Tool	Measure the distance between two existing tool results	•	•	•
Advanced Pattern	Find challenging features		•	•
Blob	Find, sort and count areas of joined pixels with a similar grey level		•	•
Optical Character Verification (OCV)	Inspects the quality of text or logos		•	•
Find Circle	Find and measure circles		•	•
Caliper Tool	Find and measure the distance between two edges		•	•
Filters	Enhance image quality for more robust inspection		•	•
1D/2D/DPM	Read 1D, 2D and DPM barcodes		•	•
Deep Learning OCR	Deep Learning-based OCR			•
Footnotes				

1. Some features available in a future release. Contact your Zebra Partner or sales representative for more information.
2. Refer to Product Reference Guide for complete list of symbologies.
3. Printing resolution, contrast, power source, illumination source, and ambient light dependent

Specifications subject to change without notice.

Specifications

VS40-SR—30° FOV Lens

Symbology/Resolution	Near	Far
5 mil Code 128	3 in./8 cm	24 in./61 cm
10 mil Code 128	3 in./8 cm	49 in./124 cm
15 mil Code 128	3 in./8 cm	70 in./178 cm
20 mil Code 128	3 in./8 cm	92 in./234 cm
5 mil DataMatrix	3 in./8 cm	13 in./33 cm
10 mil DataMatrix	3 in./8 cm	28 in./71 cm
15 mil DataMatrix	3 in./8 cm	40 in./102 cm
30 mil DataMatrix	3 in./8 cm	78 in./198 cm

VS40-WA—46° FOV Lens

Symbology/Resolution	Near	Far
5 mil Code 128	3 in./8 cm	14 in./36 cm
10 mil Code 128	3 in./8 cm	30 in./76 cm
15 mil Code 128	3 in./8 cm	42 in./107 cm
20 mil Code 128	3 in./8 cm	56 in./142 cm
5 mil DataMatrix	3 in./8 cm	8 in./20 cm
10 mil DataMatrix	3 in./8 cm	18 in./46 cm
15 mil DataMatrix	3 in./8 cm	27 in./69 cm
30 mil DataMatrix	3 in./8 cm	52 in./132 cm

xS40 Connections

The xS40 supports connections for USB-C with DisplayPort, power serial and GPIO, x-coded Ethernet, and external lighting.

Figure: xS40 Connections



1	Power Serial and GPIO
2	USB-C (with DisplayPort)
3	External Lighting
4	X-Coded Ethernet Port

Ethernet Connector

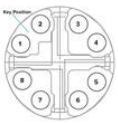


Table: Ethernet Connector Pinout Diagram

Pin	Description
1	TP1+
2	TP1-
3	TP2+
4	TP2-
5	TP4+
6	TP4-
7	TP3-
8	TP3+
SHELL	SHIELD

External Light Connector

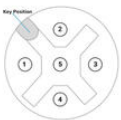


Table: External Light Connector Pinout Diagram

Pin	Color	Description
1	Brown	DC_OUT / GPIO8
2	White	GPIO7
3	Blue	GND
4	Black	GPIO6
5	Grey	ANALOG_OUT
SHELL	Bare	SHIELD

Power and IO Connector

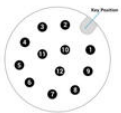


Table: Power and I/O Connector Pinout Diagram

Pin	Color	Description
1	Yellow	GPIO2
2	White/Yellow	TXD
3	Brown	RXD
4	White/Brown	GPIO4
5	Violet	GPIO5
6	White/Violet	COMMON_IN
7	Red	DC_IN
8	Black	GND
9	Green	COMMON_OUT
10	Orange	GPIO0
11	Blue	GPIO1
12	Grey	GPIO3
SHELL	Bare	SHIELD