

## NS42

NS42-WA20T4-2C00W  
WIDE ANGLE, 2.0 MP, ESSENTIAL MV AND DL OCR,  
ETHERNET WITH POE, SERIAL, USB AND  
INDUSTRIAL PROTOCOLS, RED ILLUMINATION

- Upplösning: 2.3 Megapixel
- Pixelstorlek: 3.0  $\mu\text{m}$
- Bildhastighet: 60 fps
- Integrerad fokus och belysning
- Anomaly Detection



## PRODUKTBESKRIVNING

Zebra NS42 är designad för att möta krävande tillämpningar inom industriell automation. Enheten är optimerad för robust maskinseende och integrerar kraftfulla verktyg för avvikelседetektering vid kvalitetskontroll och verifiering av monteringsmoment. NS42 stödjer även Deep learning optisk teckenigenkänning (DL-OCR), vilket möjliggör tillförlitlig och exakt avläsning av tecken – utan behov av manuell träning eller fördefinierade teckenuppsättningar.

## TEKNISK DATA

|                       |                                                       |
|-----------------------|-------------------------------------------------------|
| Belysning             | Röd                                                   |
| Fokus                 | Liquid lens                                           |
| Interface out         | Ethernet with POE, Serial, USB & Industrial Protocols |
| JavaScript-stöd       | Ja                                                    |
| Luftfuktighet         | 5% to 90% RH, non-condensing                          |
| PC-utvecklingsverktyg | Aurora Focus                                          |
| Pixelstorlek          | 3 x 3 $\mu\text{m}$                                   |
| Software performance  | ESSENTIAL MV AND DL OCR                               |
| Storlek               | 54.0 x 64.0 x 91.4 mm                                 |
| Typ av scanner        | Fixed Scanner                                         |
| Upplösning            | 2.3 MP                                                |

## Specifications

### Recommended Services

Zebra OneCare Select™, Zebra OneCare Essential™

### Decode Ranges (Typical Working Ranges)<sup>1</sup>

#### NS42-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 |

#### NS42-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 |

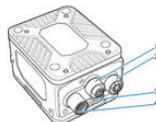
### Footnotes

1. Refer to Product Reference Guide for complete list of symbologies.
2. Printing resolution, contrast, power source, illumination source, and ambient light dependent.

Specifications subject to change without notice.

## Connections

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



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

## Power and IO Connector

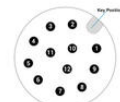


Table: Power and IO Connector Pinout Diagram

| 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       | GPIO6       |
| 11    | Blue         | GPIO1       |
| 12    | Grey         | GPIO3       |
| SHELL | Bare         | SHIELD      |

## 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+        |
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## External Light Connector

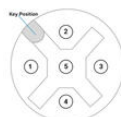


Table: External Light Connector Pinout Diagram

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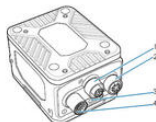
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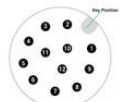


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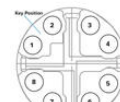


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External Light Connector

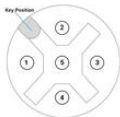


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