**OEM Automatic Ltd**
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# ZEBRA FS40 CODE READER

FS40-WA20F4-5C00W
FS40, AF, WA, 2.3 MP, Fast , 2D, Ethernet with POE, Serial, USB and Industrial Protocols, Infrared Illumination, No Filter - Worldwide



- High Performance Data Capture: The FS40 features Zebra’s PRZM Intelligent Imaging technology for reliable first-time data capture of 1D, 2D, and DPM barcodes, even on challenging surfacest
- Easy Setup and Operation: With Auto-Tune and Zebra Aurora software, the FS40 is easy to set up and deploy, offering quick image adjustments and simplified management of barcode scanning and machine vision functions
- Flexibility and Future-Proofing: The FS40 supports a wide range of symbologies and can be upgraded through software licenses for faster barcode capture or machine vision capabilities
- Integrated and Customizable Lighting: The scanner includes powerful, integrated lighting options—red, white, blue, or infrared—for capturing high-quality images, eliminating the need for external lighting
- Rugged Design: Built for industrial environments, the FS40 has an IP65/IP67 rating, is resistant to dust and water, and operates reliably in harsh conditions

### PRODUCT DESCRIPTION

Track every item in your production with the FS40 in real time. Thanks to several connection options, it is easy to integrate with your PLC.
Zebra's powerful Aurora software with its intuitive interface makes the FS40 easy to install, deploy and use. It is also possible to easily upgrade your scanner to gain access to new functions and future-proof your investment.

# TECHNICAL DATA

| | |
|---|---|
| **Focus** | Liquid lens |
| **Interface out** | Ethernet with POE, Serial, USB & Industrial Protocols |
| **Lighting** | Infrared |
| **Size** | 54.0 x 64.0 x 91.4 |
| **Software performance** | Fast 2D Barcode Decoder |
| **Type of lens** | Wide angle |
| **Type of scanner** | Fixed Scanner |

# Specifications

| Decode Ranges (Typical Working Ranges)[3] | | |
|---|---|---|
| **FS40-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 |
| **FS40-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. 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.

## 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

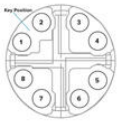



**Table: Ethernet Connector Pinout Diagram**

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

## External Light Connector

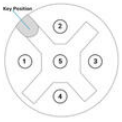



**Table: External Light Connector Pinout Diagram**

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

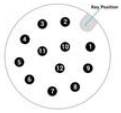



**Table: Power and I/O Connector Pinout Diagram**

| 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 |
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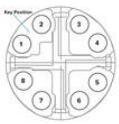



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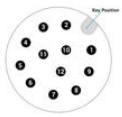



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