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ZEBRA FS40 CODE READER

FS40-WA50F4-2100W
FS40, AF, WA, 5.1 MP, Fast , 2D, Ethernet With POE, Serial, USB And Industrial Protocols, Red Illumination, Red Bandpass W/Polarizer 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	Red
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

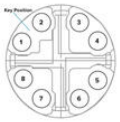


Table: Ethernet Connector Pinout Diagram

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

External Light Connector

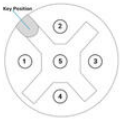


Table: External Light Connector Pinout Diagram

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

Power and IO Connector

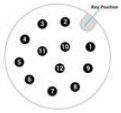


Table: Power and I/O Connector Pinout Diagram

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
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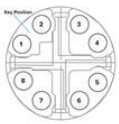


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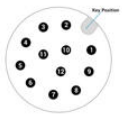


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