



L: 18.65 cm; W: 12.25 cm; H: 7.43 cm

## Features & Benefits:

- Powerful 624 MHz Processor for Fast Sensor Shutter Speed and Fast-Pulse Illumination
- Government-Grade FIPS 140-2 Validation Security
- Trigger Press Captures Photos and Transfers Information to Cradle and onto Host Computer
- Integrated Bluetooth Class II, Version 1.2
- Exceptional Motion Tolerance, Unique Aiming Pattern and Omni-Directional Scanning

## Rugged, Wireless Handheld 2D Imager

DS3578 is a cordless digital scanner with integrated Bluetooth that improves efficiency in the harshest industrial environments. Digital imaging technology allows workers to capture virtually any barcode with extreme speed and accuracy. DS3578 features CMOS (complementary metal-oxide-semiconductor) image sensors that accurately capture and process barcodes much faster than the typical digital scanner. With three models to choose from, DS3578 meets any barcode capture requirement from 1D/2D barcodes and Direct Part Marks (DPM) to Unique Identification (IUID) support.

With the press of a trigger, DS3578 captures a photo and automatically appends it to the record. The image is wirelessly transferred to the cradle and onto the host PC.

DS3578's powerful 624 MHz microprocessor decodes barcodes within milliseconds, regardless of size or density. The fast-pulse illumination and fast sensor shutter speed deliver outstanding motion tolerance. Omni-directional scanning functionality allows operators to quickly capture bar codes from any angle.

DS3578 delivers the ergonomic and operational features for the harshest environments and is built to handle the inevitable bumps and drops on concrete. An IP65-rated seal makes it impervious to dust and water. The exit window is scratch-resistant and recessed for the highest level of durability. In addition, DS3578 addresses noisy environments with harsh light with its bright LEDs, adjustable beeper volume and a vibrating pager motor placed in the handle.

Achieving government grade security with the DS3578 is easy. All models are FIPS 140-2 compliant out of the box. Just scan the included Enable FIPS Encryption bar code to activate FIPS security.

## Applications:

- Industrial, including Rugged Environments
- Fast-Paced Production

# DS3578

Wireless		
Radio	Bluetooth, Serial Port and HID Profiles	
Radio Range	Up to 100 m (300 ft.) direct line of sight in open air. Typical indoor cordless range is 33 m (100 ft) but varies depending on environment.	
Frequency	2.402 to 2.480 GHz adaptive frequency hopping and co-existence with 802.11 wireless networks	
Data Range	Basic data rate is 720 kbps. Enhanced Data Rate (EDR) for image transfer.	
Interfaces		
Supported	USB, RS232, RS485 (IBM 46xx Protocols) and Keyboard Wedge	
Performance		
Light Source	Aiming pattern: 650 nm visible laser diode; Illumination: 630 nm LED	
Imager Field of View	Standard Range Focus: 39.6° H x 25.7° V; High Density Focus: 38.4° H x 24.9° V	
Motion Tolerance	Up to 1.52 m/s (60"/s) for 100% 13 mil UPC. Varies depending on code type, scan distance and quality	
Roll, Pitch, Yaw	360°, +/-65°, +/-60°	
Mechanical/Electrical		
Dimensions (L x W x H)	18.65 cm x 12.25 cm x 7.43 cm (7.34" x 4.82" x 2.93")	
Weight	414 g (14.6 oz.)	
Battery	2200 mAh Lithium Ion	
Battery Charge Time	100% within 4.5 hours using an external power supply and up to 10 hours using USB cable	
Color	Twilight Black/Yellow	
Environmental		
Operating Temperature	-20° C to 50° C (-4° F to 122° F)	
Storage Temperature	-40°C to 70°C (-40°F to 158°F)	
Humidity	5% to 95% relative humidity, noncondensing	
Drop Specifications	Repeated 2 m (4.5') drops to concrete	
Environmental Sealing	IP65	
Cradle Insertions	250,000+ insertions	
Ambient Light Immunity	Indoor: 4842 Lux (450 ft. candles); Outdoor: 86,080 Lux (8,000 ft. candles)	
Electrostatic Discharge (ESD)	15 kV air discharge; 8 kV contact discharge	
Symbology		
1D	UPC/EAN and with supplementals, Code 39, Code 39 Full ASCII, Tri-optic Code 39, GS1 DataBar Variants, GS1-12B, Code 128, Code 128 Full ASCII, Code 93, Codabar (NW1), Interleaved 2 of 5, Discrete 2 of 5 MSI, Codell, IATA, Bookland EAN, Code 32	
PDF417 (and variants)	PDF417 (Standard, Macro), MicroPDF 417 (Standard, Macro), Composite Codes (CC-A, CC-B, CC-C)	
2D	TLC-39, Aztec (Standard, Inverse), MaxiCode, DataMatrix/ECC 200 Standard, Inverse), QR Code (Standard, Inverse, Micro)	
Postal	U.S. Postnet, U.S. Planet, U.K. Postal, Japan Postal, Australian Postal, Dutch Postal, 4 State Postal	
DMP Marks (DPM Unit only)	DataMatrix marks applied by dot-peening. All support barcode types listed above marked by laser etching, chemical etching, ink marking, molding, stamping or casting methods on surfaces such as metal, plastic, rubber or glass	
IUID Support	Supports IUID parsing. Ability to read and separate IUID fields per application requirements.	
Cradles		
	Charging Only STB 3508 and FLB 3508	Bluetooth STB 3587 and FLB 3578
Power Requirements	4.75-14 VDC	4.75-14 VDC
Typical Current Draw: Not charging	35 mA 45 mA @ 9V	105 mA @5V 110 mA @9V
Fast Rate Charge	915 mA @5V	915 mA @5V

# DS3578

(requires external power supply)	660 mA @9V	660 mA @9V
<b>Slow Rate Charge</b> (cradle default when external supply is not used)	480mA @5V 345 mA @9V	480 mA @5V 345 mA @ 9V
<b>Regulatory</b>		
<b>Electrical Safety</b>	UL60950-1, CSA C22.2 No. 60850-1, EN 60950-1 / IEC 60950-1	
<b>Laser Safety</b>	EN 60825-1, IEC 60825-1, 21CFR1040.10, CDRH Class II, IEC Class 2	
<b>EMI/RFI</b>	FCC Part 15 Class B, ICES-003 Class B, EN55022, EN55024, AS/NZS 4268-3008, Japan VCCI	
<b>Environmental</b>	Compliant with RoHS directive 2002/95/EEC	
<b>Options</b>		
<b>Accessories</b>	Holster (mounts to pants or belt); IntelliStand (hands-free); Tool Balancer Pulley (tethered); Standard Cradle (Charge Only); Standard Cradle (Radio/Charge); Fork-Lift Cradle (Charge Only); Fork-Lift Cradle (Radio/Charge)	
<b>Warranty</b>		
<b>Warranty</b>	3 years (36 months) provided product remains unmodified and operated under normal conditions.	
<b>Service</b>	Service form Start Advance Exchange Support	

## DECODE ZONE

Label Density	DS3578-SR English	DS3578-SR Metric	DS3578-HD and -DP English	DS3578-HD and -DP Metric
Code 39 – 3 mil	NA	NA	1.10" - 1.60"	2.79 – 4.06 cm
Code 39 – 4 mil	2.6" - 4.5"	6.6 – 11.43 cm	Contact – 3.5"	Contact – 8.89 cm
Code 39 – 5 mil	1.00" - 6.3"	2.54 – 16.0 cm	Contact – 4.2"	Contact – 10.67 cm
Code 39 – 7.5 mil	Contact – 10.10"	Contact – 25.65 cm	Contact – 5.4"	Contact – 13.72 cm
Code 39 – 20 mil	1.00" - 20.0"	2.54 – 53.09 cm	1.10" - 9.2"	2.79 – 23.37 cm
100% UPC – 13 mil	.9" - 15.1"	2.29 – 38.35 cm	.8" - 6.2"	2.03 – 15.75 cm
PDF417 – 6.67 mil	2.7" - 6.1"	6.86 – 15.49 cm	Contact – 3.7"	Contact – 9.4 cm
PDF417 – 10 mil	.4" - 9.3"	1.02 – 23.62 cm	Contact – 4.5"	Contact – 11.43 cm
PDF417 – 15 mil	3.3" - 14.8"	8.38 – 37.59 cm	3.2" - 5.6"	8.13 – 14.22 cm
DataMatrix – 4 mil	NA	NA	1.0" - 2.1"	2.54 – 5.33 cm
DataMatrix – 5 mil	NA	NA	.4" - 2.7"	1.02 – 6.86 cm
DataMatrix – 7.5 mil	2.1" - 5.5"	5.33 – 13.97 cm	Contact – 3.5"	Contact – 8.89 cm
DataMatrix – 10 mil	1.1" - 7.10"	2.79 – 18.03 cm	Contact – 4.4"	Contact – 11.18 cm
QR Code – 4 mil	NA	NA	1.1" – 1.4"	2.79 – 3.56 cm
QR Code – 5 mil	NA	NA	.5" - 2.2"	1.27 – 5.59 cm
QR Code – 7.5 mil	NA	NA	Contact – 3.3"	Contact – 8.38 cm
QR Code – 10 mil	1.5" - 6.1"	3.81 – 15.49 cm	Contact – 4.0"	Contact – 10.16 cm

## ABOUT JADAK:

JADAK, a business unit of Novanta, is a market leader in machine vision, RFID, barcode, printing, and color and light measurement products and services for original equipment manufacturers. The company designs and manufactures embedded detection and analysis solutions that help customers solve unique inspection, tracking, scanning and documenting. The company is ISO 9001 and ISO 13485 registered.

Novanta is a trusted technology partner to OEMs in the medical and advanced industrial technology markets, with deep proprietary expertise in photonics, vision and precision motion technologies.

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