BARTEC

Hand-held scanner BCS3600ex-NI

Datasheet

The latest generation of rugged hand-held scanners in the BCS36x8ex series for use in hazardous areas offers outstanding performance for the unparalleled scanning of 1D/2D barcodes, photos, documents and more. The devices are based on the ZEBRA series "DS3600 Ultra-Rugged Scanners" and are now also available from BARTEC in an explosion-protected version.

The series consists of a corded (BCS3608ex) and cordless (BCS3678ex) Bluetooth version, which are used in the toughest environments in theworld – in warehouses and production halls. These scanners don't just enable every 1D or 2D barcode to be scanned from a distance of up to 21.3 m, but also capture a diverse amount of business information, thereby streamlining everyday business processes, such as OCR, documents and photos. Irrespective of the type of data your employees need to collect, you now get all the familiar functions from the industrial application for use in a potentially explosive atmosphere. The BCS3600ex series therefore offers a new level of reliability for scanners.

The result? The most reliable, fastest and most accurate scanning functionality on the market, setting new standards.

The hand-held scanner BCS3600ex-NI is approved for ATEX and IECEx Zone 2/22 and NEC Class I, II, III Div.2.

Further local certifications are possible on customer request.

Outstanding performance

Your employees can scan information at high speed – virtually all current barcodes under any conditions. Photos range from those documenting the condition of incoming deliveries, through to providing images for electronic archiving (photos can only be transferred to the host PC via the base station). It is not even a problem if barcodes are damaged, soiled or have been printed in poor quality – this intelligent scanner can handle them all.

Ultra-rugged design

There is hardly any place as tough as in the warehouse or the production plant. For this reason we have now also developed a version of the DS3608 and DS3678 from ZEBRA that can be used in potentially explosive atmospheres. These models are available in a corded and cordless design, and are the most robust scanners on the market.

Unrivalled handling simplicity

With the tools available, these scanners are easy to use. You can remotely configure and extend your scanners, format data for an immediate transfer to your business applications and much more.

Outstanding scan performance with 1D/2D barcodes in every environment

The advanced imager reads 1D and 2D barcodes on a monitor or label faster and with a 30 % larger working area than comparable models of this class for unsurpassed productivity. Employees are able to successfully scan virtually any barcode at the first attempt, even if it is damaged, dirty, poorly printed or under shrink-wrap.

Ultra-rugged – the toughest design in its class

The BCS3608^{ex}/BCS3678^{ex} is our most rugged scanner yet. It has the great-est ability to withstand drops and tumbles, and has the best seal in its class. Both models are dust-proof, spray-proof and waterproof in accordance with IP 65.

More than just barcodes capture OCR, photos and documents

With ZEBRA's intelligent document capture, photos are taken, refocused and corrected to make them easier to read. Several OCR typefaces are supported, ensuring fast and simple data transfer (photos can only be transferred to the host PC via the base station).

Simple handling with the original complimen ary tools from ZEBRA

You can use the original ZEBRA tools for the DS3608-HP and DS3678-HP series. The tools available also include the 123Scan Utility and the Scanner Management Service (SMS), which offer a remote method of configuring scanners, performing firmware upgrades and formatting data appropriately for your backend systems.

Capture and processing of up to 20 barcodes simultaneously (Multi Code Data Formatting - MDF)

Many labels have several barcodes which need to be scanned by your staff. Now, one press of the trigger captures the right barcodes and applies the unique data format required for each one for instant transmission to your back-end systems – all with complete control over the order barcodes are processed.

Faster pick-list processing

Users can easily select and read an individual barcode from any pick list.

A Bluetooth model in a class of its own for superior cordless freedom

Bluetooth 4.0 (Low Energy) provides a lightning fast connection and maximum energy efficiency. The ZEBRA Wi-Fi friendly mode puts an end to the inter-ference frequently caused by Bluetooth devices in Wi-Fi environments. The compact and rugged cradle offers excellent flexibility and durability. The BCS3678^{ex} is the only scanner of this product family with a cradle in the IP 65 class of protection. Its charging contacts withstand 250,000 insertions.

The first-in-its-class 'battery charge gauge' and Bluetooth status LED make it easy to monitor battery power as well as Bluetooth connectivity.

The Power Precision +/- battery is the ultimate in battery performance and management.

Hand-held scanner BCS3608ᵉˣ-NI

The corded version is ideal for stationary applications used to collect data from 1D barcodes, 2D barcodes, postcodes and OCR in a potentially explosive atmosphere. The rugged version offers all highly developed ergonomic and functional features required in industrial applications. The corded version requires a universal supply module to guarantee excompliant voltage supply and data communication (Transfer of photos to the host PC is only possible via the base station).

Explosion protection

Marking ATEX	Ex II 3G Ex ic op is IIC T4 Gc Ex II 3D Ex ic op is IIIC T135°C Dc IP 64
Certification	EPS 16 ATEX 1 113 X
Marking IECEx	Ex ic op is IIC T4 Gc Ex ic op is IIIC T135°C Dc IP 64
Certification	IECEx EPS 16.0050X
Marking NEC	Class I Div. 2 Groups A, B, C and D Class II Div. 2 Groups G, F Class III; T4
Certification	ETL 5012876

Other approvals and certificates, see bartec.com

User environment

Operating temperature	-20 °C to +50 °C (-4 °F to 122 °F)
Storage temperature	-40 °C to +70 °C (-40 °F to 158 °F)
Relative humidity	5 % ~ 95 % (condensing)
Protection class (IEC 60529)	IP 65
Insensitivity to ambient light	0 to 108.000 lux (in direct sunlight)
Drop Specification	Survives multiple drops from 3 m (118.1 inch) onto concrete
Tumble Specification	7.500 tumbles from a height of 1 m (39.4 inch)

Technical data

Size (H x W x D)	185 mm x 76 mm x 132 mm (7.3 inch x 3.0 inch x 5.2 inch)
Weight (without cable)	with Scanner SE4750-HP: approx. 309 g (approx. 0.68 lb) with Scanner SE4850-ER: approx. 334 g (approx. 0.74 lb)
Color	Industrial green
Material	Polycarbonate (PC)
Notification	Direct decoding display, LEDs, signal tone, vibration
Operating current (full operation)	500 mA (typical)
Resting current (stand-by)	128 mA (typical)
Input voltage	5 V
Max. input power	2.75 W
Max. input current	550 mA
Power supply	using universal supply module from BARTEC or other Ex-compliant supply module
Supported interfaces	Hand-held scanner to the universal supply module RS232 (TTL-Pegel)
Illumination	2 x LED, warm white
Barcode capture	– SE4750-HP: 1D/2D High-performance scanner; omnidirectional; reading range up to 203 cm (79.9 inch) depending on type, size and quality of the barcode – SE4850-ER: 1D/2D High-performance scanner with extended range; omnidirectional; reading range up to 213 m (8385.8 inch) depending on type, size and quality of the barcode – Available data capture options/tools: see table – Supported symbologies/barcodes: see table
Programming cable USB (from PC to hand-held scanner)	available as an option; for the use of ZEBRA Software Tools such as 123Scan Utility to configure hand-held scanners in the safe area on a PC

Technical data

Programming manual	Permits programming by scanning barcodes. Available at: automation.bartec.de/indexE.htm or zebra.com
123Scan Utility	Programming of scanner parameters via USB, firmware upgrades, provision of scanned barcode data and printing of reports. Available at: zebra.com – Programming via the universal supply module is not supported. – Programming cable (Type 17-A1Z0-0020) is required in non-hazardous areas.
DataCapture DNA	A technology platform of highly intelligent firmware, software and utilities . It perfectly supports the offered hardware solution to personalize the customer solution. For more information on these Zebra-only features, please visit zebra.com/datacapturedna
Warranty	1 year
Service contracts	COMFORT and ALL-IN
Scope of delivery	– Hand-held scanner BCS3608ex-NI – Quick Start Guide
Also required	(not included in the delivery) – Universal supply module – Connecting cable or HMI limiting cable for data transmission

Accessories

See datasheet: BCS3600ex-NI Accessories
It is absolutely necessary to use original accessories from BARTEC!

Ordering information

BCS3608ex-NI	Scanner SE4750-HP	B7-A2S4-1HPO
	Scanner SE4850-ER	B7-A2S4-1ERO

Hand-held scanner BCS3678ex-NI

The Bluetooth version is ideal for mobile applications used to collect data from 1D barcodes, 2D barcodes, postcodes and OCR in a potentially explosive atmosphere (Transfer of photos to the host PC is only possible via the base station). The rugged version offers all highly developed ergonomic and functional features required in industrial applications. For the Bluetooth version there are several possibilities to transfer the data via Bluetooth „Single Point-to-Point".

Explosion protection

Marking ATEX	Ex II 3G Ex ic op is IIC T4 Gc Ex II 3D Ex ic op is IIIC T135°C Dc IP 64
Certification	EPS 17 ATEX 1 177 X
Marking IECEx	Ex ic op is IIC T4 Gc Ex ic op is IIIC T135°C Dc IP 64
Certification	IECEx EPS 17.0090X
Marking NEC	Class I Div. 2 Groups A, B, C and D Class II Div. 2 Groups G, F Class III; T4
Certification	ETL 5012876

Other approvals and certificates, see bartec.com

User environment

Operating temperature	-20 °C to +50 °C (-4 °F to 122 °F)
Charging temperature	0 °C to +45 °C (32°F to 113°F)
Storage temperature (without battery)	-40 °C to +70 °C (-40 °F to 158 °F)
Relative humidity	5 % ~ 95 % (condensing)
Protection class (IEC 60529)	IP 65
Insensitivity to ambient light	0 to 108.000 lux (in direct sunlight)
Drop Specification	Survives multiple drops from 3 m (118.1 inch) onto concrete
Tumble Specification	7.500 tumbles from a height of 1 m (39.4 inch)

Technical data

Size (H x W x D)	185 mm x 76 mm x 142 mm (7.3 inch x 3.0 inch x 5.6 inch)
Weight (without cable)	with Scanner SE4750-HP: approx. 411 g (approx. 0.91 lb) with Scanner SE4850-ER: approx. 436 g (approx. 0.96 lb)
Color	Industrial green
Material	Polycarbonate (PC)
Notification	Direct decoding display, LEDs, signal tone, vibration
Battery	Lithium-Ion 3.6 V/3150 mAh (11.34 Wh) Charge only with the following accessories: Base station (Type G7-A2Z0-0010) or 4-slot battery charging station (Type G7-A2Z0-0013)
Bluetooth	Bluetooth Class 1, Version 4.0 (LE), serial interface , USB-HID and USB-SPP via base station and USB-SPP via universal supply module Bluetooth **Radio range (direct visual connection outdoors - laboratory values)** via universal supply module Bluetooth , base station or Bluetooth-enabled device, Class 1: up to 100 m (328 ft.), Class 2: up to 10 m (33 ft.) **Data rate:** 3 Mbit/s (2.1 Mbit/s) for classic Bluetooth, 1 Mbit/s (0.27 Mbit/s) for Low Energy
Illumination	2 x LED, warm white
Barcode capture	– **SE4750-HP:** 1D/2D High-performance scanner; omnidirectional; reading range up to 2.1 m (7 ft) depending on type, size and quality of the barcode – **SE4850-ER:** 1D/2D High-performance scanner with extended range; omnidirectional; reading range up to 21.3 m (70 ft.) depending on type, size and quality of the barcode – Available data capture options/tools: see table – Supported symbologies/barcodes: see table

Technical data

Programming cable USB (from PC to hand-held scanner)	available as an option; for the use of ZEBRA Software Tools such as 123Scan Utility to configure hand-held scanners in the safe area on a PC
Programming manual	Permits programming by scanning barcodes. Available at: automation.bartec.de/indexE.htm or zebra.com
123Scan Utility	Programming of scanner parameters via USB, firmware upgrades, provision of scanned barcode data and printing of reports. Available at: zebra.com. – Programming via the universal supply module is not supported. – Base station (Type B7-A2Z0-0010) and a corresponding USB cable is required in non-hazardous areas.
DataCapture DNA	A technology platform of highly intelligent firmware, software and utilities . It perfectly supports the offered hardware solution to personalize the customer solution. For more information on these Zebra-only features, please visit zebra.com/datacapturedna
Warranty	1 year
Service contracts	COMFORT and ALL-IN
Scope of delivery	– Hand-held scanner BCS3678ex-NI – Battery – Special tool for lock nut – Quick Start Guide
Also required	(not included in the delivery) – Battery charging station or base station for charging – Universal supply module or base station + connecting cable for data transmission

Accessories

See datasheet: BCS3600ex-NI Accessories
It is absolutely necessary to use original accessories from BARTEC!

Ordering information

BCS3678ex-NI	Scanner SE4750-HP	B7-A2S4-2HP1
	Scanner SE4850-ER	B7-A2S4-2ER1

Available data capture options/tools

Multi-Code Data Formatting (MDF)	Scan multiple barcodes with a single trigger pull.
Label Parse+	Instantly parse GS1 label barcode data to improve quality control, inventory visibility and traceability.
UDI Scan+	Unlock the benefits of UDI (Unique Device Identification) to improve efficiency.
PRZM Intelligent Imaging	PRZM sets the bar for 2D imaging by enhancing decode performance and snappiness, dramatically improving the user experience.
Preferred Symbol	It is a barcode prioritization technique that lets one barcode, scanned among other barcodes, to be singled out for decoding while excluding the others.
Intelligent Document Capture*	Eliminate the cost and space required for a document scanner. Capture an image while processing barcode data and automatically optimize image appearance by de-skewing and brightening.
WI-FI Friendly Mode	Utility to avoid interfering with a wireless network.

* only with Scanner SE4750-HP

Supported Symbologies / Barcodes

1D/Linear Symbol/Codes	Bookland EAN Chinese 2 of 5 Codabar Code 11 Code 32 Code 39 Code 39 Full ASCII Code 93 Code 128 Discrete 2 of 5 GS1-128 GS1 DataBar variants Interleaved 2 of 5 ISBT 128 ISBT Concatenation ISSN Korean 3 of 5 Matrix 2 of 5 MSI Trioptic Code 39 UCC Coupon Extended Code UUPC/EAN/JAN with supplementals
2D Stacked and 2D Matrix Symbol/Codes	Aztec Composite Codes Data Matrix GS1-QR GS1-DM Han Xin Maxicode MicroPDF417 Micro QR PDF417 QR Code TLC-39
Postal Symbol/Codes	Australian Post (4-state) British Post (4-state) Canadian Post (4-state) Chinese 2 of 5 Japanese Post (4-state) Netherlands (KIX) Post Postnet UPU 4 State Postal FICS US Postnet US Planet USPS 4 State Postal (US4CB)
OCR* (6 to 60 point OCR typeface)	MICR-E13B OCR-A/B Serial number of US currency
IUID Support	Supports IUD parsing The ability to read and separate IUID fields according to application requirements.
Digimarc**	Digital watermarking technology
Document and Photos	Basic captur Advanced captur*

* only with Scanner SE4750-HP
** only with Scanner SE4850-ER