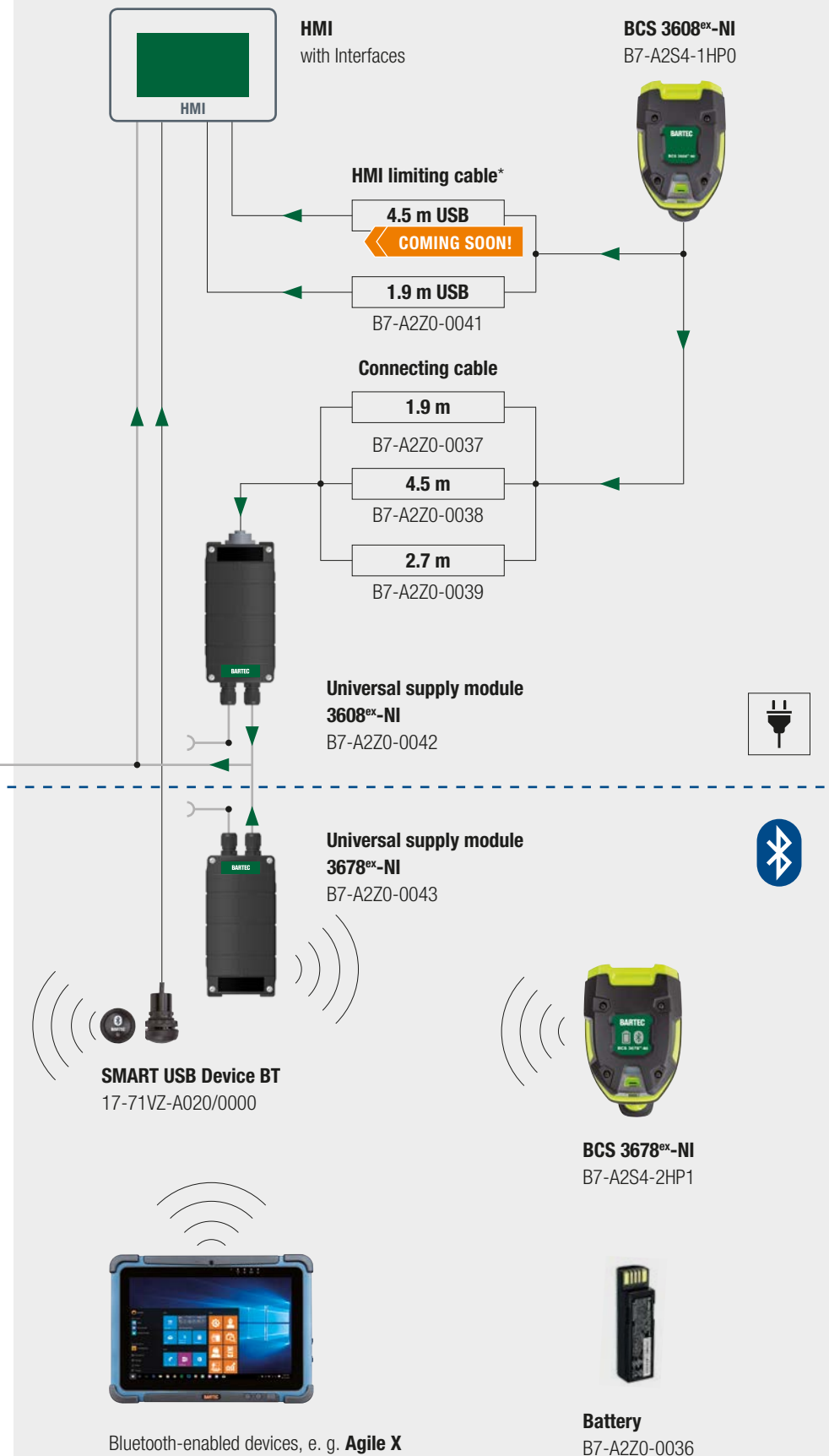
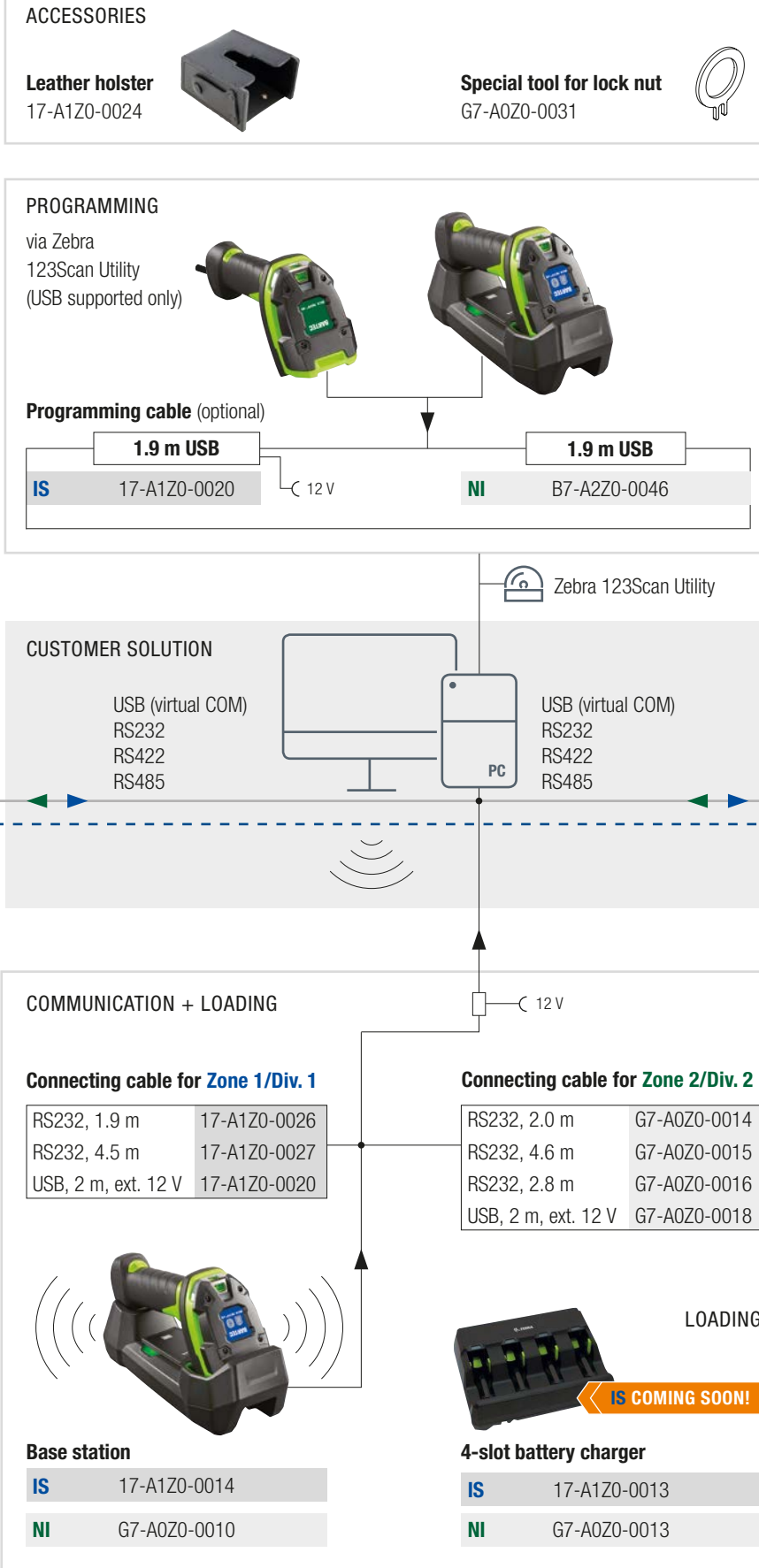
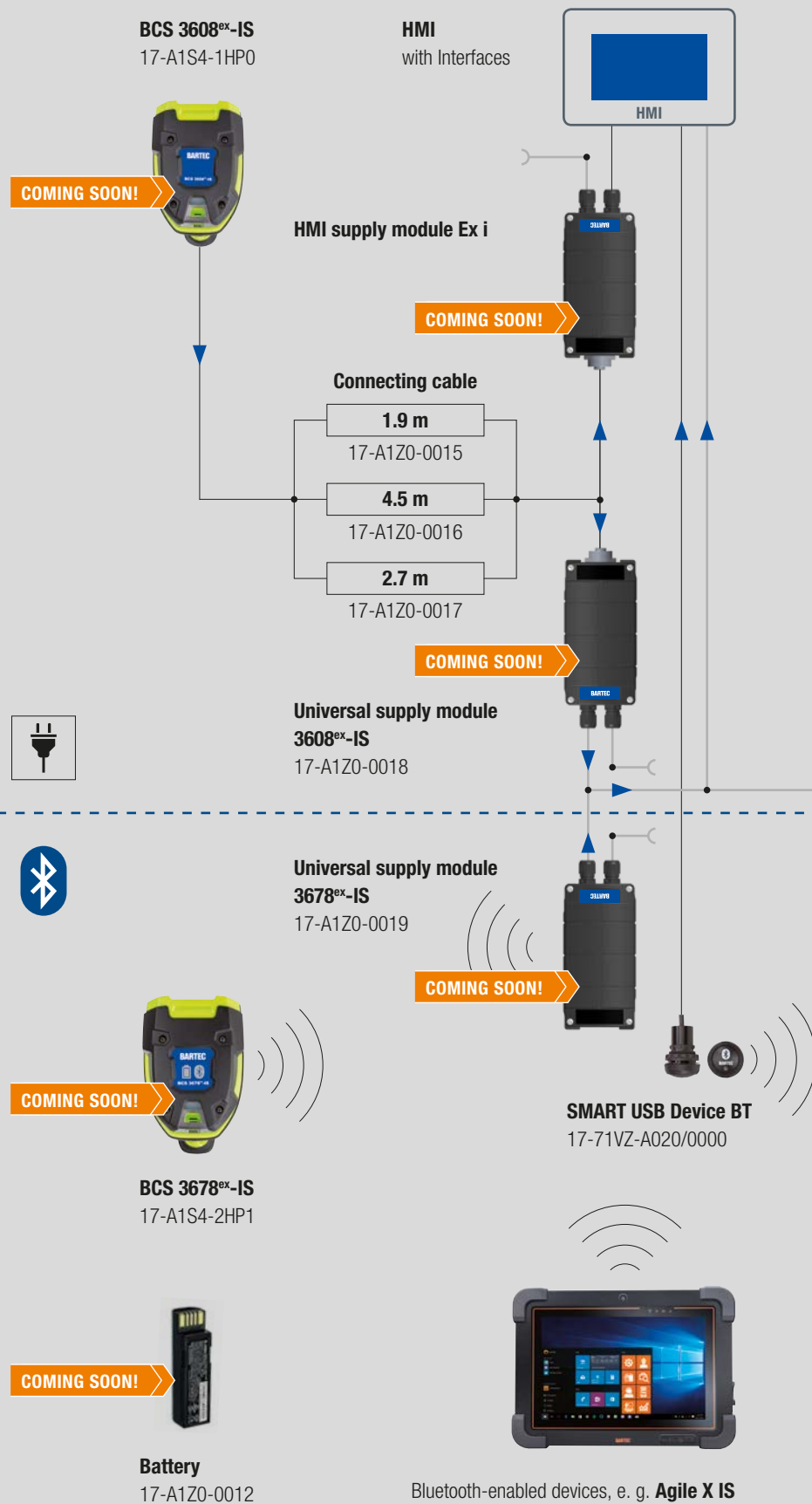




## Hand-held scanner BCS 3600<sup>ex</sup>-NI series

Data sheets







The latest generation of rugged explosion-protected hand-held scanners of the BCS 36x8<sup>ex</sup> series offers outstanding performance for incomparable capture of 1D/2D barcodes, photos, documents and more. The devices are based on the ZEBRA “3600 Ultra-Rugged Series Handheld Scanners” series and are now also available from BARTEC in an explosion-protected version. They are available for ATEX/IECEx and CSA. Further local approvals are available on request. The series consists of a corded (BCS 3608<sup>ex</sup>) and cordless (BCS 3678<sup>ex</sup>) Bluetooth version, which are used in the toughest environments in the world – 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 2.1 m, but also capture a diverse amount of business information to rationalise 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 BCS 3600<sup>ex</sup> 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.

Industries	Areas of use
Warehouse management Production	Outstanding data capture for the management of articles in the entire goods flow (incoming and outgoing goods, warehouse management, etc.) Proof of delivery Image capture

#### Decoding options

1D barcodes	UPC/EAN, UPC/EAN with supplementals, Bookland EAN, ISSN, UCC Coupon Extended Code, Code 128, GS1-128, ISBT 128, ISBT Concatenation, Code 39, Code 39 Full ASCII, Trioptic Code 39, Code 32, Code 93, Code 11, Interleaved 2 of 5, Discrete 2 of 5, Codabar, MSI, Chinese 2 of 5, Matrix 2 of 5, Korean 3 of 5, GS1 DataBar variants
2D barcodes	PDF417, MicroPDF417, Composite Codes, TLC-39, Data Matrix, Maxicode, QR Code, Micro QR, Aztec, Han Xin, GS1-QR, GS1-DM
Postcodes	US Postnet, US Planet, UK Postal, Japan Post, Australia Post, Royal Mail 4 State Customer, KIX Code (Dutch), UPU 4 State Postal FICS (Post US4), USPS 4 State Postal (Post US3)
OCR (optical character recognition, photos and documents)	OCR-A/B, MICR-E13B, Series number of US currency

#### Decoding ranges

Symbology/resolution	Near/distant
Code 128: 0.127 mm	15.2 to 35.6 cm
Code 128: 0.508 mm	12.7 to 114.3 cm
Code 128: 1.016 mm	7.1 to 203.2 cm
DataMatrix: 0.1905 mm	17.8 to 27.9 cm
DataMatrix: 0.254 mm	15.2 to 38.1 cm

#### • Outstanding performance

Your employees can scan information at high speed – virtually all current barcodes under any conditions. From photos to document the condition of incoming deliveries, through to images for the purpose of electronic archiving. 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 an explosion protected version of the DS 3608 and DS 3678 from ZEBRA. These models are available in a corded or 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, monitor the battery charge of cordless models 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 BCS 3608<sup>ex</sup>/BCS 3678<sup>ex</sup> is our toughest scanner yet, with the highest drop and tumble specification and the best sealing of its class. The BCS 3608<sup>ex</sup>/BCS 3678<sup>ex</sup> is built to survive a 2.4 m drop to concrete, which is 23 % more durable than any other scanner in this class. The BCS 3608<sup>ex</sup>/BCS 3678<sup>ex</sup> operates reliably even after 5,000 tumbles, simulating the real-world tumbling that occurs with a drop. Both models are dust-proof, spray-proof and water-proofed to 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. The support of several OCR typefaces also ensures fast and simple data transfer.

#### • Simple handling with the original complimentary tools from ZEBRA

You can use the original ZEBRA tools for the DS3608-HP and DS3678-HP series. The 123Scan Utility and the Scanner Management Service (SMS) are available with which scanners can be configured remotely, firmware upgrades carried out, data formatted to fit your backend systems or the Power Precision +/- battery statistics checked and more.

#### • Capture and processing of up to 20 barcodes simultaneously

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.

#### • Extreme temperature rating

These scanners withstand extreme cold, heat and moisture, and can therefore be deployed almost anywhere.

#### • 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. Our ZEBRA Wi-Fi Friendly Mode eliminates the interference that Bluetooth devices can often create in Wi-Fi environments. The compact and rugged cradle offers excellent flexibility and durability. The BCS 3678<sup>ex</sup> 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 represents the ultimate when it comes to battery performance and management. You achieve more scans per battery charge compared to rival products and obtain a wealth of data about the condition of the battery, for example past charge cycles, current battery status and an operating status display that indicates whether batteries are functioning efficiently and are fully charged or whether they must be taken out of operation.



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 ex-compliant voltage supply and data communication.

### Explosion protection

Marking ATEX Zone 2/22	II 3G Ex ic IIC T4 Gc II 3D Ex ic IIIB T135 °C Dc IP 64
Certification	EPS 16 ATEX 1113 X
Marking IECEx Zone 2/22	Ex ic IIC T4 Gc Ex ic IIIB T135 °C Dc IP 64
Certification	IECEx EPS 16.0050X
Marking ETL	Class I, II, III Div 2 Class I Div 2 Groups A, B, C and D Class II Div 2 Groups E, F Class III Class I Div 2 Class I Div 2 Groups A, B, C and D T4
Certification	applied for
Other approvals and certificates, see <a href="http://www.bartec.de">www.bartec.de</a>	

### Technical data

Physical features	
Dimensions (H x W x D)	185 mm x 76 mm x 132 mm
Weight	309 g excluding cord
Operating current (full operation)	500 mA (typical)
Resting current (stand-by)	165 mA (typical)
Input voltage	5 V
Max. input power	2.75 W
Max. input current	550 mA
Max. inner capacity	752.57 µF
Max. inner inductivity	17.4 µH
Colour	Industrial green
Material	Lexane EXL 1414
User displays	Direct decoding display, LEDs, signal tone, vibration
Power supply	using universal supply module or other Ex-compliant supply module
Supported interfaces	RS232 (Scanner to the universal power supply module)

Performance features	
Illumination	2 x LED, warm white
High-performance scanner 1D/2D imager SE4750	For scanning 1D barcodes, 2D barcodes, postcodes, OCR
User environment	
Ambient temperature	-20 °C to +50 °C
Storage temperature	-40 °C to +70 °C
Relative air humidity	5 % to 95 %, condensing
Protection class	IP 65
Insensitivity to ambient light	0 to 108,000 lux (in direct sunlight)
Programming/service programs	
Programming cable (from PC to scanner via USB)	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: <a href="http://www.zebra.com">www.zebra.com</a>
123Scan Utility	Programming of scanner parameters via USB, firmware upgrades, provision of scanned barcode data and printing of reports. Available at: <a href="http://www.zebra.com">www.zebra.com</a> Programming via the universal supply module is not supported. A programming cable (Typ B7-A2Z0-0046) required in non-hazardous areas.
Scanner Management Service (SMS)	Performs remote administration of your ZEBRA scanners and retrieves its inventory data. Available at: <a href="http://www.zebra.com">www.zebra.com</a>
Scope of delivery	BCS 3608 <sup>ex</sup> -NI, Quick start guide Also required: (not included with delivery) Universal supply module + connecting cable or HMI limiting cable for data transmission

### Ordering information



BCS 3608 <sup>ex</sup> -NI	<b>B7-A2S4-1HPO</b>
Technical data subject to change without notice.	





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. 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 Zone 2/22	 II 3G Ex ic IIC T4 Gc  II 3D Ex ic IIIB T135 °C Dc IP 64
Certification	EPS 16 ATEX 1113 X
Marking IECEx Zone 2/22	Ex ic IIC T4 Gc Ex ic IIIB T135 °C Dc IP 64
Certification	IECEx EPS 16.0050X
Marking ETL	Class I, II, III Div. 2 Class I Div. 2 Groups A, B, C and D Class II Div. 2 Groups E, F Class III Class I Div. 2 Class I Div. 2 Groups A, B, C and D T4
Certification	5012876
Other approvals and certificates, see <a href="http://www.bartec.de">www.bartec.de</a>	

### Technical data

Physical features	
Dimensions (H x W x D)	185 mm x 76 mm x 142 mm
Weight	411 g
Operating current (full operation)	650 mA (typical)
Resting current (stand-by)	4 mA (typical)
Max. input voltage	4.2 V
Max. input power	2.275 W
Max. input current	10 A
Max. inner capacity	1105.2 µF
Max. inner inductivity	15.96 µH
Colour	Industrial green
Material	Lexane EXL 1414
User displays	Direct decoding display, LEDs, signal tone, vibration
Battery	Lithium-ion 3.6 V/3150 mAh
Cordless connection to	Bluetooth universal supply module, base station, Bluetooth-enabled terminal devices Bluetooth Class 1, Version 4.0 (LE), serial interface (SPP) and HID profile
Radio range (direct visual connection outdoors - laboratory values)	Via Bluetooth universal supply module, base station or Bluetooth-enabled terminal devices Class 1: at least 100.0 m Class 2: at least 10.0 m
Data rate	3 Mbit/s (2.1 Mbit/s) for classic Bluetooth 1 Mbit/s (0.27 Mbit/s) for Low Energy

Performance features	
Illumination	2 x LED, warm white
High-performance scanner 1D/2D imager SE4750	For scanning 1D barcodes, 2D barcodes, postcodes, OCR
User environment	
Ambient temperature	-20 °C to +50 °C
Storage temperature	-40 °C to +70 °C
Relative air humidity	5 % to 95 %, condensing
Protection class	IP 65
Insensitivity to ambient light	0 to 108,000 lux (in direct sunlight)
Programming/service programs	
Programming cable (from PC to scanner via USB)	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: <a href="http://www.zebra.com">www.zebra.com</a>
123Scan Utility	Programming of scanner parameters via USB, firmware upgrades, provision of scanned barcode data and printing of reports. Available at: <a href="http://www.zebra.com">www.zebra.com</a> Programming via the universal supply module is not supported. A cradle for non-hazardous areas and a corresponding USB cable are required in non-hazardous areas.
Scanner Management Service (SMS)	Performs remote administration of your ZEBRA scanners and retrieves its inventory data. Available at: <a href="http://www.zebra.com">www.zebra.com</a>
Scope of delivery	BCS 3678 <sup>ex</sup> -NI, Battery, Special tool for safety lock, Quick start guide Also required: (not included with delivery) Battery charger or base station for charging Universal supply module or base station + connecting cable for data transmission






### Ordering information

BCS 3678 <sup>ex</sup> -NI	<b>B7-A2S4-2HP1</b>
Technical data subject to change without notice.	



## Ordering information

### Accessories for use in potentially explosive atmospheres

Illustration	Description	Order no.
	<b>Battery</b> for hand-held scanner BCS 3678 <sup>ex</sup> -NI Lithium-ion battery 3.6 V/3150 mAh (11.34 Wh) May only be changed outside the potentially explosive atmosphere!	<b>B7-A2Z0-0036</b>
	<b>High quality leather holster</b> for hand-held scanner - for attachment to a belt or wall - Colour: black	<b>17-A1Z0-0024</b>
	<b>Connection cable</b> Connection between universal supply module and BCS 3608 <sup>ex</sup> -NI handheld scanner 1.9 m (plain) 4.5 m (plain)	<b>B7-A2Z0-0037</b> <b>B7-A2Z0-0038</b>
	2.7 m (spiral)	<b>B7-A2Z0-0039</b>
	<b>HMI limiting cable</b> Connection between HMI and BCS 3608 <sup>ex</sup> -NI handheld scanner, with open cable ends 1.9 m (plain) USB 1.9 m (plain) RS232 4.5 m (plain) RS232; can be individually shortened	<b>B7-A2Z0-0041</b> <b>B7-A2Z0-0040</b> <b>B7-A2Z0-0050</b>



## Ordering information

### Accessories for use outside potentially explosive atmospheres

Illustration	Description	Order no.
	<b>4-slot battery charger</b> for hand-held scanner BCS 3678 <sup>ex</sup> -NI <ul style="list-style-type: none"> <li>- Input voltage: DC 12 V (50 W)</li> <li>- Charging display via LED and sound</li> </ul> Additionally required: (not included in delivery) <ul style="list-style-type: none"> <li>- Power pack with DC connecting cable</li> <li>- AC power cable</li> </ul>	<b>G7-A0Z0-0013</b>
	<b>Base station</b> for hand-held scanner BCS 3678 <sup>ex</sup> -NI <ul style="list-style-type: none"> <li>- Input voltage                             <ul style="list-style-type: none"> <li>- at RS232: DC 12 V</li> <li>- at USB: DC 5 V</li> </ul> </li> <li>- Data synchronisation via Bluetooth</li> </ul> Supported interfaces: <ul style="list-style-type: none"> <li>- USB</li> <li>- RS232</li> <li>- Keyboard Wedge*</li> <li>- IBM 468x/469x*</li> </ul> <ul style="list-style-type: none"> <li>- Charging the battery inserted in the handheld scanner</li> <li>- LED charge function and charging indicator</li> <li>- Dimensions (H x B x T) 229.4 mm x 99.8 mm 82.6 mm</li> <li>- IP 65</li> </ul> Additionally required: (not included in delivery) <ul style="list-style-type: none"> <li>- Power pack with DC connecting cable</li> <li>- AC power cable</li> <li>- Connecting cable (type 17-A1Z0-....)</li> </ul> <p>*Connection cable on request.</p>	<b>G7-A0Z0-0010</b>





## Ordering information

## Accessories for use outside potentially explosive atmospheres

Illustration	Description	Order no.
	<b>Programming cable</b> for programming BCS 3608 <sup>ex</sup> -NI via PC, supports connection via USB only 1.9 m (plain)	<b>B7-A2Z0-0046</b>
	<b>Power supply</b> with DC connection cable for 4-slot battery charger - Input voltage: AC 100 V to 240 V - Output voltage: DC 12 V/4, 16 A/50 W	<b>G7-A0Z0-0019</b>
	<b>AC power cable</b> - US + Canada - EU + APAC - TAIWAN Other versions on request.	<b>G7-A0Z0-0024</b> <b>G7-A0Z0-0026</b> <b>G7-A0Z0-0027</b>
	<b>Connecting cable</b> for handheld scanner BCS 3678 <sup>ex</sup> -NI - Connection between cradle and PC - Cable with terminal for 12 V power supply RS232: 2.0 m (plain) RS232: 4.6 m (plain) RS232: 2.8 m (spiral) USB: 2.0 m (plain)	<b>G7-A0Z0-0014</b> <b>G7-A0Z0-0015</b> <b>G7-A0Z0-0016</b> <b>G7-A0Z0-0018</b>
	<b>Special tool for lock nut</b> for hand-held scanner BCS 3678 <sup>ex</sup> -NI - For opening and locking the special lock - 5 pieces	<b>G7-A0Z0-0031</b>

# Universal supply module for hand-held scanner BCS 3600<sup>ex</sup>-NI series

for ATEX/IECEX Zone 2/22 and ETL Class I, II, III Div. 2



The universal supply module is designed for an intrinsically safe supply (barrier) and contains a safety barrier (evaluation barrier) for data lines in a potentially explosive atmosphere. The data lines can be connected directly in the potentially explosive atmosphere to non-Ex systems, for example PCs, PLCs or microprocessors. The data interface to be used can be set using dip switches. These adjustment possibilities make it easier for an existing old system to subsequently be converted and modified.

## Explosion protection

Marking ATEX Zone 2/22	<div> <div>II 3G</div> <div>Ex ic IIC T4 Gc</div> </div> <div> <div>II 3D</div> <div>Ex ic IIIB T135 °C Dc IP 64</div> </div>
Certification	EPS 16 ATEX 1113 X
Marking IECEX Zone 2/22	<div>Ex ic IIC T4 Gc</div> <div>Ex ic IIIB T135 °C Dc IP 64</div>
Certification	IECEX EPS 16.0050X
Marking ETL	<div>Class I, II, III Div 1</div> <div>Class I Div 1 Groups A, B, C and D</div> <div>Class II Div 1 Groups E, F</div> <div>Class III</div> <div>Class I Div 1</div> <div>Class I Div 1 Groups A, B, C and D T4</div>
Certification	applied for
Other approvals and certificates, see <a href="http://www.bartec.de">www.bartec.de</a>	

## Technical data

Physical features	
Dimensions (H x W x D)	81 mm x 176 mm x 88 mm
Input voltage	DC 24 V, AC 85 to 250 V
Colour	black
Material	Thermoplastic
Supported interfaces	<div>Universal supply module</div> <div>to the PC/host</div> <div>max. cable length</div> <div>USB*</div> <div>5 m</div> <div>RS232</div> <div>15 m</div> <div>RS422</div> <div>1000 m</div> <div>RS485</div> <div>1200 m</div> <div>* USB only works as SPP (Serial Port Profile),</div> <div>HID (Human Interface Device) is not supported.</div>
Bluetooth	<div>Bluetooth 4.2 (LE), Class 1</div> <div>Pairing with 1 scanner (Point to Point)</div> <div>SPP - the digital scanner connects to the</div> <div>universal supply module via Bluetooth.</div> <div>The universal supply module is recognised as a</div> <div>serial connection by the PC/host.</div> <div>Radio range (direct visual contact outside –</div> <div>laboratory values) with BCS 3678<sup>ex</sup></div> <div>Class 1: at least 100.0 m</div>

Connecting cable (Power pack to host)	<div>Not available in scope of delivery!</div> <div>Please use commercially available shielded data</div> <div>lines to avoid outside interference</div>
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User environment	
Ambient temperature	-20 °C to +50 °C
Storage temperature	-40 °C to +70 °C
Relative air humidity	5 % to 95 %, condensing
Protection class	IP 65
Insensitivity to ambient light	0 to 108,000 lux (in direct sunlight)

## Specification

Weight	380 g
Max. output voltage	5 V
Max. output current	550 mA
Max. output power	2.75 W

## Note when programming using Zebra 123Scan utility:

Programming via the universal supply module is not supported.

## Ordering information

Universal supply module, corded for BCS 3608 <sup>ex</sup> -NI	<b>B7-A2Z0-0042</b>
Universal supply module, Bluetooth for BCS 3678 <sup>ex</sup> -NI	<b>B7-A2Z0-0043</b>
(Scope of delivery: 1 x universal supply module)	
Technical data subject to change without notice.	

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