Hand-held scanner BCS 160ex
for 1D and PDF barcodes

Features

- Insensitive to direct sunlight (100 000 lux)
- High level of impact resistance
- Wide range of decoding capabilities
- All standard 1D and PDF barcodes
- 500 scans per second
- RS232/RS422 or USB interface via power pack
- Good-read feedback with signal LED, acoustic signal and vibration

Description

The sturdy wired Hand-held scanner BCS 160ex offers the highly developed ergonomic and functional features required in industrial applications.

The scan line is wider than in conventional laser scanners and therefore easier to see. This makes aiming at the barcode much easier – even on hard-to-access objects. Its high scanning and decoding frequency of 500 Hz enables easy scanning of a large number of barcodes in quick succession.

The BCS 160ex has a robust enclosure that can withstand use even in the toughest conditions. Even dropping it onto the ground several times from a height of 2 m will not damage this scanner.

Design

The BCS 160ex hand-held scanner with integrated decoder is suitable for a plug-in connection to the power pack. The power pack is installed directly in the hazardous area. It contains a module for the intrinsically safe supply (barrier) for the hand-held scanner and an isolator (evaluation barrier) for the data lines.

The data lines can be connected directly in hazardous areas to non-Ex systems, e.g. PCs, PLC or microprocessors. This applies to Zone 1, 2 and to Zone 21, 22.

Explosion protection

Ex protection type
⟨Ex⟩ II 2G Ex ib IIC T4 Gb
$-20\ °C \le T_a \le +50\ °C$

⟨Ex⟩ II 2D Ex ib IIIC T135 °C Db

Certification
IBExU 13 ATEX 1083

Technical data

Ambient temperature
-20 °C to +50 °C

Storage temperature
-30 °C to +70 °C

Code reading capabilities
all standard 1D barcodes,
PDF barcodes only with a PDF scan engine

Good-read feedback
LED signal, acoustic signal and vibration

Scan rate
500 scans per second

Light source
visible red light 630 nm

Reading distance
up to 80 cm (for 0.5 mm code)

Connection of
scanner to the supply unit
can be plugged in using connection cable
RS232   maximum length   9.8 m
USB   maximum length   3.8 m

Supply unit to the host
RS232   maximum length   20 m
RS422   maximum length 1000 m
USB   maximum length   5 m

Weight
ca. 200 g without cable

Air humidity
5 % to 95 % (non-condensing)

Dimensions (height x width x depth)
104 mm x 76 mm x 185 mm

Protection class
IP 65

Operating voltage/power requirements
U = 4.9 V

supply via corresponding power pack.

Accessories for BCS 160ex
- power pack
- extension cable plug/socket 4.5 m or 6 m
- connection cable with 1.8 m or 3.8 m
- bracket for wall/desk-top installation

1D barcodes captured:

Codabar	Mainland China Postal Code
Code 11	
Code 32	MSI/Plessey
Code 39	UK/Plessey
Code 93	Standard and Industrial 2 of 5
Code 128	
German ITF Postal Code	Telepen
Interleaved & Matrix 2 of 5	UPC-A
Limited/Expanded GS1 DataBar	UPC-E
	UCC/EAN-128

PDF barcodes captured:

(only with PDF Scan Engine)

Composite (type-dependent)
PDF417
MicroPDF417
Codablock F

Reading field

Bar width in mm
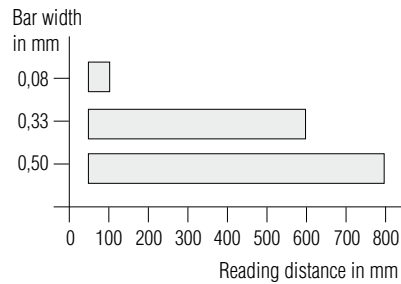
Connection possibility

RS232/RS422, USB

PC

Supply voltage

Supply module

BCS 160ex

Safe area   Ex area
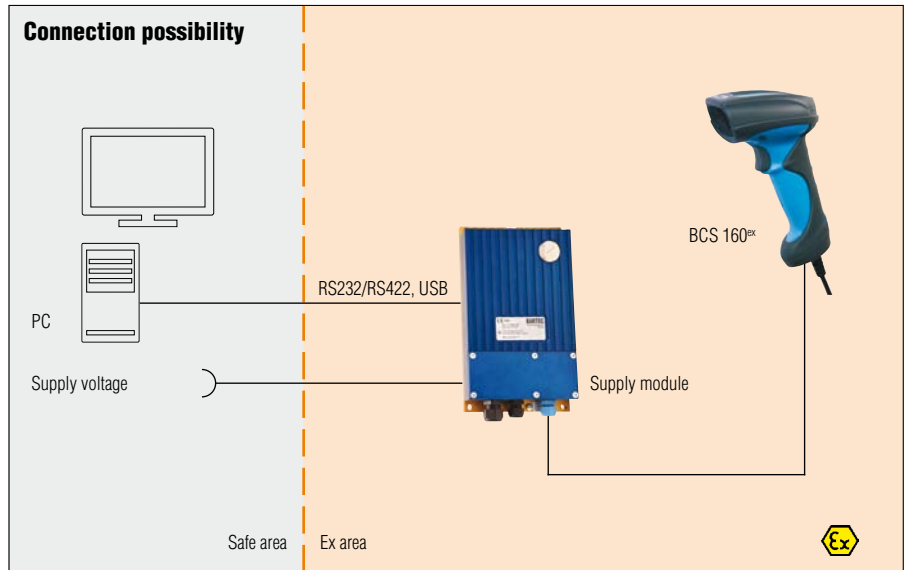
Selection chart

Barcode options	Code no.
1D Scan Engine	**R**
1D/PDF Scan Engine	**T**

➡ **Complete order no. 17-21BA-M31S/ ☐ 000/0000**
Hand-held scanner BCS 160ex without connection cable

Note: Further accessories must be ordered separately.
Please insert correct code. Technical data subject to change without notice.