



*Radio hand-held scanner  
BCS 160<sup>ex</sup> BT for 1D and PDF barcodes*

### Features

- Insensitive to direct sunlight (100 000 lux)
- High level of impact resistance
- Reads a wide range of barcodes
- All standard 1D and PDF barcodes
- 500 scans per second
- RS232/RS422 or USB interface via base station
- Good-read feedback with LED signal, acoustic signal and vibration
- Base station also usable in hazardous areas
- Connection of up to 7 BCS 160<sup>ex</sup> BT Radio hand-held scanners to one base station

### Description

The sturdy radio hand-held scanner BCS 160<sup>ex</sup> BT from BARTEC offers all 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 160<sup>ex</sup> BT has a robust enclosure that can withstand use even in the toughest conditions. Even dropping onto the ground several times from a height of 2 m will not damage this scanner.

### Design

The Radio hand-held scanner BCS 160<sup>ex</sup> BT with integrated decoder is designed for wireless data capture in real time and ensures a highly efficient operation in manufacturing halls, warehouses and other sites.

When capturing data, the user can move freely up to a radius of 30 m around the base station. The Radio hand-held scanner BCS 160<sup>ex</sup> BT is produced with the “intrinsically safe” type of protection and can be used directly in hazardous areas Zone 1, 2 and Zone 21, 22.

### Base station

The base station is the charging station (cradle) and also serves as a radio receiver station and can be installed in either hazardous or non-hazardous areas. The RS232 or USB cable enables a connection to all standard hosts.

### Explosion protection

#### Ex protection type

⊕ II 2G Ex ib IIC T4 Gb  
-20 °C ≤ T<sub>a</sub> ≤ +50 °C

⊕ II 2D Ex ib IIIC T135 °C Db

#### Certification

IBExU 13 ATEX 1084

### Technical data

#### Ambient temperature

-20 °C to +50 °C

#### Storage temperature

-30 °C to +70 °C

#### Charging temperature

0 °C to +50 °C

#### Decoding capabilities

all standard 1D barcodes,  
PDF barcodes only with PDF scan engine

#### Scan rate

ca. 500 scans per second

#### Good-read feedback

LED signal, acoustic signal and vibration

#### Light source

630 nm laser diode

#### Reading distance

up to 80 cm (for 0.5-mm code)

#### Connection of

##### Ex base station to the supply unit

RS232 maximum length 9.8 m

USB maximum length 3.8 m

##### Non-Ex base station to the host

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

#### Radio specifications

##### Radio range

max. 30 m (with unobstructed view)

##### Frequency

Bluetooth V2.1 EDR Class 2

2.4 to 2.4835 GHz (ISM Band)

#### Weight

approx. 266 g incl. battery

#### 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 Bluetooth base station**

4.9 V to 5.6 V

Supply to the Ex version via corresponding power pack

**Battery**

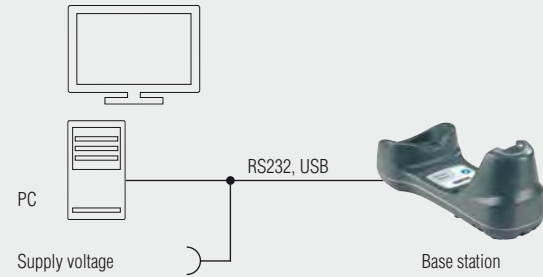
Lithium-ion battery 3.6 V, 2250 mAh

BARTEC Type: 17-21BE-M040/0000

**Accessories for BCS 160BT<sup>ex</sup>**

- Base station with data transmission and charging function in Ex or non-Ex
- charging station
- Supply unit
- Connecting cable
- Bracket for wall/desk-top installation

**Possible connection**



BCS 160<sup>ex</sup> BT

Safe area Ex area



**1D barcodes captured:**

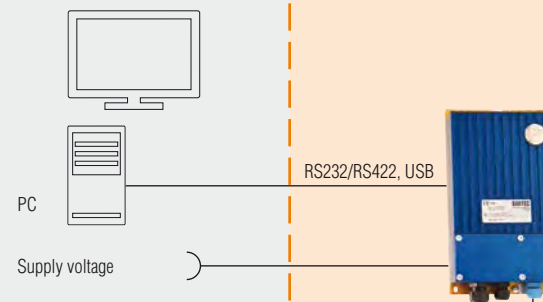
Codabar	Mainland China
Code 11	Postal Code
Code 32	MSI/Plessey
Code 39	UK/Plessey
Code 93	Standard and Industrial 2 of 5
Code 128	Standard and Industrial 2 of 5
German ITF Postal Code	Telepen
Interleaved & Matrix 2 of 5	UPC-A
Limited/Expanded GS1 DataBar	UPC-E
	UCC/EAN-128

**PDF barcodes captured:**

(only with PDF Scan Engine)

Composite (type-dependent)
PDF417
MicroPDF417
Codablock F

**Possible connection**



BCS 160<sup>ex</sup> BT

Supply module

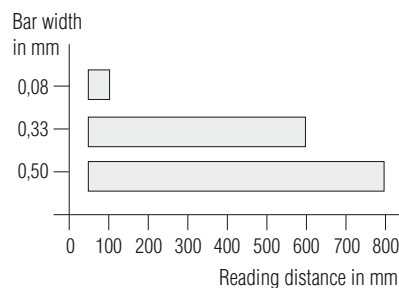
Base station

RS232, USB

Safe area Ex area



**Reading field**



**Selection chart**

Barcode options	Code no.
1D Scan Engine	<b>R</b>
1D/PDF Scan Engine	<b>T</b>

➔ **Complete order no. 17-21BA-M32S/  000**  
**Radio hand-held scanner BCS 160<sup>ex</sup> BT**  
**without connection cable or base station**

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