

# BCS3600<sup>ex</sup>-IS Hand-held scanner

## Supply modules



The supply modules are used for an intrinsically safe supply (barrier) of the hand-held scanners and contain a safety barrier (evaluation barrier) for the data lines in a potentially explosive atmosphere.

The data lines can be connected from the hazardous area to non-Ex systems, e.g. PCs or PLCs, without an additional barrier/safety barrier. The data interface to be used can be set with a barcode. These adjustment possibilities make it easier for an existing old system to subsequently be converted and modified.

- Certified for Zone 1 and Div. 1 hazardous areas
- Enables connection of scanner to non-Ex systems
- Variety of serial interfaces and connecting cables supported
- Max. cable length 1.200 m
- Compatible with Ex i and Ex e host interfaces

# Universal supply module

for BCS3608<sup>ex</sup>-IS Hand-held scanner

## Explosion protection

Marking ATEX	Ⓜ II 2(1)G Ex eb ma [ia Ga] IIC T4 Gb Ⓜ II 2(1)D Ex tb [ia Da] IIIC T80 °C Db IP64
Certification	EPS 18 ATEX 1 013 X
Marking IECEX	Ex eb ma [ia Ga] IIC T4 Gb Ex tb [ia Da] IIIC T80 °C Db IP64
Certification	IECEX EPS 18.0009X

Other approvals and certificates, see [bartec.com](http://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)

## Technical data

Size (H x W x D)	81 mm x 222 mm x 88 mm (3.2 inch x 8.7 inch x 3.5 inch)	
Weight	approx. 1050 g (approx. 2.31 lb)	
Input voltage	DC 24 V ± 10% / 0.05 A / 0.7 W AC 100 V - 240 V ± 10% / 50/60 Hz / 0.01 A / 1 W	
Color	black	
Material	Thermoplastic	
Supported serial interfaces	Universal supply module to PC/Host	
		max. cable length
	USB-SPP*	5 m
	RS232	15 m
	RS422	1000 m
	RS485	1200 m
	* USB only works as SPP (Serial Port Profile), HID (Human Interface Device) is not supported.	
Connection to hand-held scanner	One hand-held scanner can be connected to the universal supply module.	

## Data transmission/ Data processing

### Unidirectional:

Data can be sent from the scanner to another system via the universal supply module.

### Note on data transmission:

Bidirectional data transmission is not supported.

### Note on data processing:

All serial interfaces available on the universal supply module have no intelligence of their own.

The interface itself is not able to process/handle incoming data. A software application (e.g. software Keyboardwedge) is required. (not available in the scope of delivery from BARTEC).

## Serial parameters

The serial parameters of the Universal supply module are preset to the following parameters.

The baud rate can be adjusted up to 115200 baud.

The other parameters are preset and cannot be reprogrammed.

Baud rate	9600 Baud
Parity	None
Stop bits	1 Bit
Data bits	8 Bit
Hardware Handshaking	None
Software Handshaking	None

## Warranty

1 year

## Scope of delivery

Universal supply module

## Also required

(not included in the delivery)

- Connecting cable from universal supply module to hand-held scanner
- Connecting cable from universal supply module to PC/Host: Please use commercially available shielded data cables to avoid external interference. Recommendation: CAT5; similar or better

## Accessories

### See datasheet: BCS3600<sup>ex</sup>-IS Accessories

It is absolutely necessary to use original accessories from BARTEC!

## Ordering information

Universal supply module corded  
for BCS3608<sup>ex</sup>-IS Hand-held scanner

17-A1Z0-0018

# Universal supply module

for BCS3678<sup>ex</sup>-IS Hand-held scanner

## Explosion protection

Marking ATEX	Ⓜ II 2G Ex eb ma IIC T4 Gb Ⓜ II 2D Ex tb IIIC T80 °C Db IP64
Certification	EPS 18 ATEX 1 013 X
Marking IECEX	Ex eb ma IIC T4 Gb Ex tb IIIC T80 °C Db IP64
Certification	IECEX EPS 18.0009X

Other approvals and certificates, see [bartec.com](http://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)

## Technical data

Size (H x W x D)	81 mm x 222 mm x 88 mm (3.2 inch x 8.7 inch x 3.5 inch)	
Weight	approx. 1050 g (approx. 2.31 lb)	
Input voltage	DC 24 V ± 10% / 0.05 A / 0.7 W AC 100 V - 240 V ± 10% / 50/60 Hz / 0.01 A / 1 W	
Color	black	
Material	Thermoplastic	
Supported serial interfaces	Universal supply module to PC/Host max. cable length	
	USB-SPP*	5 m
	RS232	15 m
	RS422	1000 m
	RS485	1200 m
	* USB only works as SPP (Serial Port Profile), HID (Human Interface Device) is not supported.	
Connection to hand-held scanner	One hand-held scanner can be paired to the universal supply module (Point to Point). The hand-held scanner connects to the universal supply module via Bluetooth. The universal supply module is recognised as a serial connection by the PC/host.	

## Data transmission/ Data processing

### Unidirectional:

Data can be sent from the scanner to another system via the universal supply module.

### Note on data transmission:

Bidirectional data transmission is not supported.

### Note on data processing:

All serial interfaces available on the universal supply module have no intelligence of their own.

The interface itself is not able to process/handle incoming data. A software application (e.g. software Keyboardwedge) is required. (not available in the scope of delivery from BARTEC).

## Bluetooth

Bluetooth 4.2 (LE), Class 2  
Radio range (direct visual contact outside – laboratory values) with BCS3678<sup>ex</sup> Class 2: up to 100 m (300 ft.) only when receiving data

## Serial parameters

The serial parameters of the Universal supply module are preset to the following parameters.

The baud rate can be adjusted up to 115200 baud.

The other parameters are preset and cannot be reprogrammed.

Baud rate	9600 Baud
Parity	None
Stop bits	1 Bit
Data bits	8 Bit
Hardware Handshaking	None
Software Handshaking	None

## Warranty

1 year

## Scope of delivery

Universal supply module

## Also required

(not included in the delivery)

- Connecting cable from universal supply module to hand-held scanner
- Connecting cable from universal supply module to PC/Host: Please use commercially available shielded data cables to avoid external interference. Recommendation: CAT5; similar or better

## Accessories

See datasheet: BCS3600<sup>ex</sup>-IS Accessories

It is absolutely necessary to use original accessories from BARTEC!

## Ordering information

Universal supply module Bluetooth for BCS3678 <sup>ex</sup> -IS Hand-held scanner	17-A1Z0-0019
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# Supply module Ex i

for BCS3608<sup>ex</sup>-IS Hand-held scanner

## Explosion protection

Marking ATEX	Ⓜ II 2(1)G Ex eb ib ma [ia Ga] IIC T4 Gb Ⓜ II 2(1)D Ex tb ib [ia Da] IIIC T80 °C Db IP64
Certification	EPS 18 ATEX 1 013 X
Marking IECEx	Ex eb ib ma [ia Ga] IIC T4 Gb Ex tb ib [ia Da] IIIC T80 °C Db IP64
Certification	IECEx EPS 18.0009X

Other approvals and certificates, see [bartec.com](http://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)

## Technical data

Size (H x W x D)	81 mm x 222 mm x 88 mm (3.2 inch x 8.7 inch x 3.5 inch)
Weight	approx. 1040 g (approx. 2.29 lb)
Input voltage	DC 24 V ± 10% / 0.2 A / 5 W AC 100 V - 240 V ± 10% / 50/60 Hz / 0.1 A / 6 W
Color	black
Material	Thermoplastic
Supported serial interfaces	Universal supply module to PC/Host max. cable length
	USB-SPP* 5 m
	RS232 (TTL-Pegel) 15 m
* USB only works as SPP (Serial Port Profile), HID (Human Interface Device) is not supported.	
Connection to hand-held scanner	One hand-held scanner can be connected to the supply module Ex i.

## Data transmission/ Data processing

### Unidirectional:

Data can be sent from the scanner to another system via the universal supply module.

### Note on data transmission:

Bidirectional data transmission is not supported.

### Note on data processing:

All serial interfaces available on the universal supply module have no intelligence of their own.

The interface itself is not able to process/handle incoming data. A software application (e.g. software Keyboardwedge) is required. (not available in the scope of delivery from BARTEC).

## Passive Ex i interface (RS232 + USB)

Level signal	5 V
Supply voltage	5 V
Max. input voltage	U <sub>i</sub> 6 V
Max. input current	I <sub>i</sub> 0,5 A
Max. input power	P <sub>i</sub> 2 W
Max. inner capacity	C <sub>i</sub> 5,7 µF
Max. inner inductance	L <sub>i</sub> 0 µF

## Serial parameters

The serial parameters of the supply module Ex i cannot be reprogrammed and are preset to: RS232 and USB-SPP Host Parameters (Default)

Baud rate	9600 Baud
Parity	None
Stop bits	1 Bit
Data bits	8 Bit
Hardware Handshaking	None
Software Handshaking	None

## Warranty

1 year

## Scope of delivery

Supply module Ex i

## Also required

(not included in the delivery)

- Connecting cable from supply module Ex i to hand-held scanner
- Connecting cable from supply module Ex i to PC/Host: Please use commercially available shielded data cables to avoid external interference. Recommendation: CAT5; similar or better

## Accessories

See datasheet: BCS3600<sup>ex</sup>-IS Accessories

It is absolutely necessary to use original accessories from BARTEC!

## Ordering information

Supply module Ex i corded  
for BCS3608<sup>ex</sup>-IS Hand-held scanner

17-A1Z0-0025

# Supply module Ex i

for BCS3678<sup>ex</sup>-IS Hand-held scanner

## Explosion protection

Marking ATEX	Ⓜ II 2G Ex eb ib ma IIC T4 Gb Ⓜ II 2D Ex tb ib IIIC T80 °C Db IP64
Certification	EPS 18 ATEX 1 013 X
Marking IECEx	Ex eb ib ma IIC T4 Gb Ex tb ib IIIC T80 °C Db IP64
Certification	IECEx EPS 18.0009X

Other approvals and certificates, see [bartec.com](http://bartec.com)

## User environment

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## Technical data

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Color	black
Material	Thermoplastic
Supported serial interfaces	Universal supply module to PC/Host max. cable length USB-SPP* 5 m RS232 (TTL-Pegel) 15 m * USB only works as SPP (Serial Port Profile), HID (Human Interface Device) is not supported.
Connection to hand-held scanner	One hand-held scanner can be paired to the supply module Ex i (Point to Point). The hand-held scanner connects to the supply module Ex i via Bluetooth. The supply module Ex i is recognised as a serial connection by the PC/host.

## Data transmission/ Data processing

**Unidirectional:**  
Data can be sent from the scanner to another system via the universal supply module.

**Note on data transmission:**  
Bidirectional data transmission is not supported.

**Note on data processing:**  
All serial interfaces available on the universal supply module have no intelligence of their own. The interface itself is not able to process/handle incoming data. A software application (e.g. software Keyboardwedge) is required. (not available in the scope of delivery from BARTEC).

## Bluetooth

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## Passive Ex i interface (RS232 + USB)

Level signal	5 V
Supply voltage	5 V
Max. input voltage	U <sub>i</sub> 6 V
Max. input current	I <sub>i</sub> 0.5 A
Max. input power	P <sub>i</sub> 2 W
Max. inner capacity	C <sub>i</sub> 5.7 µF
Max. inner inductance	L <sub>i</sub> 0 µF

## Serial parameters

The serial parameters of the supply module Ex i cannot be reprogrammed and are preset to: RS232 and USB-SPP Host Parameters (Default)

Baud rate	9600 Baud
Parity	None
Stop bits	1 Bit
Data bits	8 Bit
Hardware Handshaking	None
Software Handshaking	None

## Warranty

1 year

## Scope of delivery

Supply module Ex i

## Also required

(not included in the delivery)  
– Connecting cable from supply module Ex i to PC/Host: Please use commercially available shielded data cables to avoid external interference. Recommendation: CAT5; similar or better

## Accessories

See datasheet: BCS3600<sup>ex</sup>-IS Accessories

It is absolutely necessary to use original accessories from BARTEC!

## Ordering information

Supply module Ex i Bluetooth for BCS3678 <sup>ex</sup> -IS Hand-held scanner	17-A1Z0-0028
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