

# Supply modules BCS3600<sup>ex</sup>-IS

Datasheet



**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.

# Universal supply module for hand-held scanner BCS3608<sup>ex</sup>-IS



## Explosion protection

Marking ATEX	Ex II 2(1)G Ex eb ma [ia Ga] IIC T4 Gb Ex 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 <a href="http://bartec.com">bartec.com</a>

## 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.

## 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).

## Connection to hand-held scanner

One hand-held scanner can be connected to the universal supply module.

## 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 hand-held scanner BCS3608 <sup>ex</sup> -IS	17-A1Z0-0018
--	--------------

# Universal supply module for hand-held scanner BCS3678<sup>ex</sup>-IS



## Explosion protection

Marking ATEX	Ex II 2G Ex eb ma IIC T4 Gb Ex 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 <a href="http://bartec.com">bartec.com</a>

## 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.

Data transmission/ Data processing	<p><b>Unidirectional:</b> Data can be sent from the scanner to another system via the universal supply module.</p> <p><b>Note on data transmission:</b> Bidirectional data transmission is not supported.</p> <p><b>Note on data processing:</b> 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).</p>
---------------------------------------	--

Connection to hand-held scanner	<p>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.</p>
---------------------------------	---

Bluetooth	<p>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</p>
-----------	--

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.											
	<table border="1"> <tr> <td>Baud rate</td> <td>9600 Baud</td> </tr> <tr> <td>Parity</td> <td>None</td> </tr> <tr> <td>Stop bits</td> <td>1 Bit</td> </tr> <tr> <td>Data bits</td> <td>8 Bit</td> </tr> <tr> <td>Hardware Handshaking</td> <td>None</td> </tr> <tr> <td>Software Handshaking</td> <td>None</td> </tr> </table>	Baud rate	9600 Baud	Parity	None	Stop bits	1 Bit	Data bits	8 Bit	Hardware Handshaking	None	Software Handshaking
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) <ul style="list-style-type: none"> <li>– Connecting cable from universal supply module to hand-held scanner</li> <li>– 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</li> </ul>

## 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 hand-held scanner BCS3678 <sup>ex</sup> -IS	17-A1Z0-0019
---	--------------

# Supply module Ex i for hand-held scanner BCS3608<sup>ex</sup>-IS



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.

Data transmission/ Data processing	<b>Unidirectional:</b> Data can be sent from the scanner to another system via the universal supply module.	
	<b>Note on data transmission:</b> Bidirectional data transmission is not supported.	
	<b>Note on data processing:</b> 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).	

Connection to hand-held scanner	One hand-held scanner can be connected to the supply module Ex i.	
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)	
	<ul style="list-style-type: none"> <li>– Connecting cable from supply module Ex i to hand-held scanner</li> <li>– 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</li> </ul>	

## Explosion protection

Marking ATEX	Ex II 2(1)G Ex eb ib ma [ia Ga] IIC T4 Gb Ex 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 <a href="http://bartec.com">bartec.com</a>

## 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

## 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 hand-held scanner BCS3608 <sup>ex</sup> -IS	17-A1Z0-0025
---	--------------

# Supply module Ex i for hand-held scanner BCS3678<sup>ex</sup>-IS



## Explosion protection

Marking ATEX	Ex II 2G Ex eb ib ma IIC T4 Gb Ex 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 <a href="http://bartec.com">bartec.com</a>

## 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.

## 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).

## 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.

## 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

## 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 hand-held scanner BCS3678 <sup>ex</sup> -IS	17-A1Z0-0028
--	--------------