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INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx UL 16.0160 Issue No: 1 Certificate history:

Issue No. 1 (2018-10-30)

Issue No. 0 (2017-01-09)

Date of Issue: 2018-10-30

Applicant: BARTEC GmbH

Max-Eyth-Straße 16 97980 Bad Mergentheim

Germany

Current

Optional accessory:

Type of Protection: Intrinsic Safety "ia" and Optical Radiation "op is"

Marking:

Status:

Ex ia op is IIC T4 Ga

Ex ia op is IIC T4 Gb

Ex ia op is I Ma Ex ia op is I Mb

-20°C ≤ Ta ≤ +50°C

Approved for issue on behalf of the IECEx Katy A. Holdredge

Certification Body:

Position: Senior Staff Engineer

Signature:

(for printed version)

Date: 2018-10-30

- 1. This certificate and schedule may only be reproduced in full.
- 2. This certificate is not transferable and remains the property of the issuing body.
- 3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

UL LLC 333 Pfingsten Road Northbrook IL 60062-2096 United States of America



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Manufacturer: BARTEC GmbH

Max-Eyth-Straße 16 97980 Bad Mergentheim

Germany

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-11 : 2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

Edition:6.0

IEC 60079-28: 2015 Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation

Edition:2

This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

US/UL/ExTR16.0185/01

Quality Assessment Report:

DE/TUN/QAR06.0017/10



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The device covered by this certificate is a handheld tablet computer with touch screen. It is powered by a non-replaceable, rechargeable, internal battery and an optional, replaceable external battery pack. Connection facilities are provided for a USB stick, an SD card, a SIM card, and other external accessories. The device may be configured with a RFID/NFC reader and/or a laser barcode scanner.

Please see Annex for additional information.

SPECIFIC CONDITIONS OF USE: NO



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Issue 1: Added alternative enclosure material, Group I certification and intrinsic safety entity parameters to various external ports. Revised nomenclature to designate Group I models, increased the ingress protection to IP65, various minor electrical and mechanical changes.

Annex

Annex to IECEX UL 16.0160 Issue 1.pdf



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TYPE DESIGNATION

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Nomenclature for "Agile X IS" Tablet PC, Type 17-A1B*-****-****:
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Type 17- A1B *-***/******* (Certification)
        3 or 4 or A – Group II, Zone 1 Certified – Ex ia op is IIC T4 Gb
        5 or 6 or B - Group II, Zone 0 Certified - Ex ia op is IIC T4 Ga
        C – Groups I and II, Zone 1 Certified – Ex ia op is IIC T4 Gb, Ex ia op is I Mb D – Groups I and II, Zone 0 Certified – Ex ia op is IIC T4 Ga, Ex ia op is I Ma
        E – Group I, Zone 1 Certified – Ex ia op is I Mb
        F - Group I, Zone 0 Certified - Ex ia op is I Ma
Type 17- A1B *-***/*********** (Display)
        1 – 10" Capacitive
Type 17- A1B *-****/************ (WAN Carriers)
        0 – None
        1 or 2 – 4G/LTE
Type 17- A1B *-***/************ (Operating System)
        0-9 – Functions not affecting construction
Type 17- A1B *-****/*********** (Processor)
        0-9 - Functions not affecting construction
Type 17- A1B *-***/******** (Memory)
        0-9 - Functions not affecting construction
Type 17- A1B *-***/******** (Memory)
        0-9 - Functions not affecting construction
Type 17- A1B *-***/******* (Camera)
        0 – None
        1 – 5MP Rear, 2MP Front
Type 17- A1B *-***/********* (External Battery)
        0 – None
        1 - 7.4V / 4200 mAh
Type 17- A1B *-***/*********** (Data Acquisition)
        0 – None
        1 – RFID HF/NFC
Type 17- A1B *-***/******* (Scanner)
        0 – None
        1 – 1D/2D-Imager SE4500
Type 17- A1B *-***/************ (Customer variants)
        A-Z/0-9 - Customer Variants not affecting construction
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PARAMETERS RELATING TO THE SAFETY

Powered by internal battery rated 7.4V, 4200mAh, and optional external battery pack, BARTEC Type 17-A1Z0-0006 rated 7.4V, 4200mAh. The external battery pack may be replaced in a hazardous location.

U_m = 25V for the DCin jack and Docking Connector, which may not be used in a hazardous location.



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Accessories:

The device may be used with the following BARTEC accessories, which are included as part of this certification:

• Type 17-A1Z0-0007 USB Memory Stick. Alternatively, the USB Port has the following intrinsic safety entity parameters:

USB Port:	Uo = 6.07V					
	Io = 4.46A					
	Po = 2.15W					
	Co = 28µF	Co = 12µF	Co = 9µF	Co = 6.9µF		
	Lo = 2µH	Lo = 5µH	Lo = 7µH	Lo = 9µH		

• Type 17-A1Z0-00** SD Memory Card, where ** is 08, 09, or 10. Alternatively, the SD Card Port has the following intrinsic safety entity parameters:

SD Card Port:	Uo = 4.63V	
	lo = 2.76A	
	Po = 1.18W	
	Co = 79µF	
	Lo = 2μH	

• Expansion Port – The Expansion Port has the following intrinsic safety entity parameters. Under this certificate, the Agile X IS has been subjected to additional mechanical tests with the BARTEC Model 17-A1Z0-0005 HART Module connected. The Model 17-A1Z0-0005 HART Module is certified under IECEx EPS 15.0065X.

Expansion Port:	Uo = 8.11V		
	Io = 5.69A		
	Po = 8.04W		
	Co = 7.6µF	Co = 5.3µF	
	Lo = 2μH	Lo = 5μH	



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MARKING

Marking has to be readable and indelible; it has to include the following indications:

TABLET-PC - Type 17-A1B3-***/******

Agile X IS - Type: 17-A1B3-***/*******

😡 II 2 G Exia op is IIC T4 Gb DEMKO 16 ATEX 1803 Ex ia op is IIC T4 Gb IECEx UL16.0160

-20°C≤Ta≤+50°C; IP65

Intrinsically safe when used with BARTEC battery pack - No. 17-A120-0006 (USB-Stick - No. 17-A120-0007 and Micro SD cards - No. 17-A120-0008-0009-0010 and other accessories per manual 11-A1B4-700001 Securitis intriseque assurée par l'emploi des produits BARTEC suivants : lot de batteries – rét. 17-A120-0006 (de USB – rét. 17-A120-0007 et cartes MicroSD – rét. 17-A120-0009-0010 et autres accessoires indiqués dans le manuel 11-A1B4-700001

WARNING: Do not charge battery or use docking connectoring Read user manual before use (11-A1B4-7D0001). ctorin a hazardous area. Um = 25V.

AVERTISSEMENT: Ne pas recharger la batterie ou utiliser une station d'accueil en zone dangereuse. Um = 25V. Lire attentivement le mode d'emploi avant toute utilisation (11-A1B4-7D0001).

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TABLET-PC - Type 17-A1B4-***/******

Agile X IS - Type: 17-A1B4-****/*******

II 2 G Ex ia op is IIC T4 Gb DEMKO 16 ATEX 1803 Exia op is IIC T4 Gb IECEx UL16.0160 Class I, Division 1, Groups A, B, C, and D; T4 Class I, Zone 1, AEx ia IIC T4 Gb; Ex ia IIC T4 Gb -20°C≤ Ta ≤ +50°C: IP65

Intrinsically safe when used with BARTEC battery pack - No. 17-A120-0006 / USB-Stick - No. 17-A120-0007 and Micro SD cards - No. 17-A120-0008 / USB-Stick - No. 17-A120-0007 and Other accessories per manual 11-A184-700001
Sécurité intrinséque assurée par l'emploi des produits BARTEC suivants : lot de batteries - réf. 17-A120-0006 / clé USB - réf. 17-A120-0007 et cartes MicroSD - réf. 17-A120-0008-00099-0010 et autres accessoires indiqués dans le manuel 11-A184-700001

WARNING: Do not charge battery or use docking connectorin a hazardous area. Um = 25V.
Read user manual before use (11-A194-700001).

AVERTISSEMENT: Ne pas recharger la batterie ou utiliser une station d'accueil en zone dangereuse. Um = 25V.
Line attentivement le mode d'emploi avant toute utilisation (11-A184-700001).

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E.D.P EQUIPMENT FOR USE IN HAZ.LOC.



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TABLET-PC - Type 17-A1B5-***/******

Agile X IS - Type: 17-A1B5-***/*******

II 1 G Ex ia op is IIC T4 Ga DEMKO 16 ATEX 1803 Ex ia op is IIC T4 Ga IECEx UL16.0160

-20°C≤Ta≤+50°C; IP 65

Intrinsically safe when used with BARTEC battery pack - No. 17-A120-0006 / USB-Stick - No. 17-A120-0007 and Micro SD cards - No. 17-A120-0008-00091-0010 and other accessories per manual 11-A194-700001 Sécunité intrinséque assurée par l'emploi des produits BARTEC suivants : lot de batteries - ref. 17-A120-0006 / clé USB - réf. 17-A120-0007 et carles MicroSD - réf. 17-A120-0008-00091-0010 et autres accessoires indiqués dans le manuel 11-A184-700001

WARNING: Do not charge battery or use docking connectorin a hazardous area. Um = 25V.
Read user manual before use (11-A184-700001).

AVERTISSEMENT: Ne pas recharger la batterie ou utiliser une station d'accueil en zone dangereuse. Um = 25V.
Lire attentivement le mode d'emploi avant toute utilisation (11-A184-700001).

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TABLET-PC - Type 17-A1B6-***/******

Agile X IS - Type: 17-A1B6-***/******

🔂 II 1 G Ex ia op is IIC T4 Ga DEMIKO 16 ATEX 1803
Ex ia op is IIC T4 Ga
IECEX LL16.0160
Class I, Division 1, Groups A, B, C, and D; T4
Class I, Zone 0, AEx ia IIC T4 Ga; Ex ia IIC T4 Ga

-20°C≤ Ta ≤ +50°C; IP65

Intrinsically safe when used with BARTEC kattery pack - No. 17-A120-0006 / USB-Stick - No. 17-A120-0007 and Micro SD cards - No. 17-A120-0008-00091-0010 and other accessories per manual 11-A184-700001 Sécurité intrinséque assurée par l'emploi des produits BARTEC suivants : lot de batteries - réf. 17-A120-0006 / de USB - réf. 17-A120-0007 et cartes Micro SD - réf. 17-A120-0008-00091-0010 et autres accessoires indiqués dans le manuel 11-A184-700001

WARNING: Do not charge kattery or use docking connectorin a hazardous area. Um = 25V.
Read user manual before use (11-A194-700001).

AVERTISSEMENT: Ne pas recharger la batterie ou utiliser une station d'accueil en zone dangereuse. Um = 25V.

Lire attentivement le mode d'emploi avant toute utilisation (11-A194-700001).

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TABLET-PC - Type 17-A1BA-***/******

Agile X IS - Type: 17-A1BA-****/*******

II 2 G Ex ia op is IIC T4 Gb DEMICO 16 ATEX 1803 Ex ia op is IIC T4 Gb IECEx UL16.0160 Class I, Division 1, Groups A, B, C, and D; Class II, Division 1, Groups E, F and G; Class III; T4 Class I, Zone 1, AEx ia IIC T4 Gb; Ex ia IIC T4 Gb

-20°C≤ Ta ≤ +50°C: IP 65

Intrinsically safe when used with BARTEC battery pack - No. 17-A120-0006 / USB-Stack - No. 17-A120-0007 and Micro SD cards - No. 17-A120-0008-0009-0010 and other accessories per manual 11-A184-700001 Securité intrinseque assurée par l'emploi des produits BARTEC suivants: lot de batteries - réf. 17-A120-0006 / de USB - réf. 17-A120-0007 et cartes MicroSD - réf. 17-A120-0008/-0009/-0010 et autres accessoires indiqués dans le manuel 11-A184-7D0001

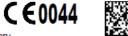
WARNING: Do not charge battery or use docking connectorin a hazardous area. Um = 25V.
Read user manual before use (11-A194-700001).

AVERTISSEMENT: Ne pas recharger la batterie ou utiliser une station d'accueil en zone dangereuse. Um = 25V.
Lire attentivement le mode d'emploi avant toute utilisation (11-A184-700001).

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E.D.P EQUIPMENT FOR USE IN HAZ.LOC.





TABLET-PC - Type 17-A1BB-***/******

Agile X IS - Type: 17-A1BB-***/*******

II 1 G Ex ia op is IIC T4 Ga DEMKO 16 ATEX 1803 DENING 16 AILED AIDS Exia op is IIC T4 Ga IECEx UL16.0160 Class I, Division 1, Groups A, B, C, and D; Class II, Division 1, Groups E, F and G; Class III; T4 Class II, Zone 0, AExia IIC T4 Ga; Exia IIC T4 Ga

-20°C≤ Ta ≤ +50°C; IP 65

Intrinsically safe when used with BARTEC battery pack - No. 17-A120-0006 / USB-Stick - No. 17-A120-0007 and Micro SD cards - No. 17-A120-0008-00091-0010 and other accessories per nanual 11-A184-7D0001 Sécurité intrinsèque assurée par l'emploi des produits BARTEC suivants: lot de batteries - Pét 17-A120-0006 / de USB - Pét 17-A120-0007 et cartes Micro SD - Pét 17-A120-0008-0009-0010 et autres accessoires indiqués dans le manuel 11-A184-7D0001

WARNING: Do not charge loatiery or use docking connectorin a hazardous area. Um = 25V.
Read user manual before use (11-A194-700001).

AVERTISSEMENT: Ne pas recharger la batterie ou utiliser ume station d'accueil en zone dangereuse. Um = 25V.
Lire attentivement le mode d'emploi avant toute utilisation (11-A194-700001).

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TABLET-PC - Type 17-A1BC-***/******

Agile X IS - Type: 17-A1BC-****/*******

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Class I, Division 1, Groups A, B, C, and D;
Class II, Division 1, Groups E, F and G; Class III; T4
Class I, Zone 1, AEx ia IIC T4 Gb; Ex ia IIC T4 Gb -20°C≤Ta≤+50°C; IP 65

Intrinsically safe when used with BARTEC battery pack - No. 17-A120-0006 / USB-Stick - No. 17-A120-0007 and Micro SD cards - No. 17-A120-0008-00091-0010 and other accessories per manual 11-A184-700001 Sécurité intrinsèque assurée par l'emploi des produits BARTEC suivants: lot de batteries - réf. 17-A120-0006 / dé USB - réf. 17-A120-0007 et cartes Micro SD - réf. 17-A120-0008-0009-0010 et autres accessoires indiqués dans le manuel 11-A184-700001

WARNING: Do not change leathery or use diocking connectorin a hazardous area. Um = 25V.
Read user manual before use (11-A184-7D0001).

AVERTISSEMENT: Ne pas rechanger la batterie ou wilbiser ume station d'accueil en zone dangereuse. Um = 25V.
Lire attentivement le mode d'emploi avant toute utilisation (11-A184-7D0001).

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TABLET-PC - Type 17-A1BD-****/******

Agile X IS - Type: 17-A1BD-****/*******

II 1 G Ex ia op is IIC T4 Ga I M1 Ex ia op is I Ma DEMKO 16 ATEX 1803 DEMINO TO ALEX 1000
Exia op is IC T4 Ga
Exia op is I Ma
IECEX UL16.0160
Class I, Division 1, Groups A, B, C, and D;
Class II, Division 1, Groups E,F and G; Class III; T4
Class I, Zone 0, AEx ia IIC T4 Ga; Ex ia IIC T4 Ga

-20°C ≤ Ta ≤ +50°C; IP 65

Intrinsically safe when used with BARTEC battery pack - No. 17-A120-0006 / USB-5tick - No. 17-A120-0007 and Micro SD cards - No. 17-A120-0008-0009-0010 and other accessories per manual 11-A184-700001 Securité intrinseque assurée par l'emploi des produits BARTEC suivants: lot de batteries - ref. 17-A120-0008 / de USB - ref. 17-A120-0007 et cartes Micro SD - réf. 17-A120-0008/-0009-0010 et autres accessories indiqués dans le manuel 11-A184-700001

WARNING: Do not charge battery or use docking connectorin a hazardous area. Um = 25V.
Read user manual before use (11-A194-700001).

AVERTISSEMENT: Ne pas recharger la batterie ou utiliser une station d'accueil en zone diangereuse. Um = 25V.
Line attentivement le mode d'emploi avant toute utilisation (11-A184-700001).

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TABLET-PC - Type 17-A1BE-***/******

Agile X IS - Type: 17-A1BE-***/*******

■ I M2 Ex ia op is I Mb DEMKO 16 ATEX 1803 Ex ia op is I Mb IECEx UL16.0160

-20°C ≤ Ta ≤ +50°C; IP 65

Intrinsically safe when used with BARTEC battery pack - No. 17-A120-0006 / USB-Stick - No. 17-A120-0007 and Micro SD cards - No. 17-A120-0008-00091-0010 and other accessories per manual 11-A184-700001 Sécurité intrinsèque assurée par l'emploi des produits BARTEC suivants: lot de batteries - réf. 17-A120-0006 / dé USB - réf. 17-A120-0007 et cartes MicroSD - réf. 17-A120-0008-00090-0010 et autres accessoires indiquès dans le manuel 11-A184-700001

WARNING: Do not charge battery or use docking connectorin a hazardous area. Um = 25V.
Read user manual before use (11-A194-700001).

AVERTISSEMENT: Ne pas recharger la batterie ou utiliser une station d'accueil en zone dangereuse. Um = 25V.
Line attentivement le mode d'emploi avant toute utilisation (11-A184-700001).



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TABLET-PC - Type 17-A1BF-***/******

Agile X IS - Type: 17-A1BF-****/*******

I M1 Ex ia op is I Ma DEMKO 16 ATEX 1803 Ex ia op is I Ma IECEx UL16.0160

-20°C ≤ Ta ≤ +50°C; IP 65

Intrinsically safe when used with BARTEC kattery pack - No. 17-A120-0006 / USB-Stick - No. 17-A120-0007 and Micro SD cards - No. 17-A120-0008-0009-0010 and other accessories per manual 11-A184-700001 Sécurité intrinsèque assurée par l'emploi des produits BARTEC suivants: lot de batteries - rét. 17-A120-0006 / de USB - rét. 17-A120-0007 et cartes MicroSD - rét. 17-A120-0007-0090-0010 et autres accessoires indiqués dans le manuel 11-A184-7D0001

WARNING: Do not charge battery or use docking connectorin a hazardous area. Um = 25V.
Read user manual before use (11-A184-70001).

AVERTISSEMENT: Ne pas recharger la batterie ou utiliser une station d'accueil en zone dangereuse. Um = 25V.
Lire attentivement le mode d'emploi avant toute utilisation (11-A184-70001).

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