FAQ Agile S NI

General:

1. **Will Agile X be discontinued?**
   No, we will continue to offer Agile and Agile X for customers that require UHF RFID and HART Depending on the demand of the market for these functionalities, we will work on a solution to incorporate them into Agile S NI.

2. **What are the main considerations for maintenance and storage of the device?**
   - Protect the device from impact by using appropriate accessories
   - Use the supplied stylus or your finger for the touchscreen. Do not use sharp objects or place heavy equipment on top of the screen.
   - Do not use aggressive cleaners. We recommend using a soft cloth moistened with water or a non-alkaline detergent to wipe the exterior of the product. This should be done outside of the Ex are only.
   - We recommend always cleaning the devices after use, particularly if they are used in an environment where they come in direct contact with chemicals or dust. Also, make sure the cap for connection ports is closed to avoid ingress of dust and possible damage.
   - Do not expose the tablet to extreme temperatures, store in direct sunlight or leave in dirty, wet environments
   - Tablet and batteries should be stored in a dry and cool place
   - For longer periods of storage (>6 months), remove the batteries from the tablet, store in a cool environment (around 0 °C to +10° C), and charge them every 3 months to approximately 40-50%.

3. **How can I extend the battery life of my tablet?**
   The life of the battery will depend on different use factors and the device settings, such as:
   - Use and setting of WLAN / Bluetooth
   - Background lighting/screensaver
   - Power management settings
   - Use and setting of 1D-/2D- Imager
   - Use and setting of 4G/LTE module
   - Use and setting of RFID module
   - Use and setting of the camera
   We recommend disabling features that are not being used and to adjust settings to lower power consumption under display brightness (Fig. 1), battery (Fig. 2) and power & sleep mode (Fig. 3).
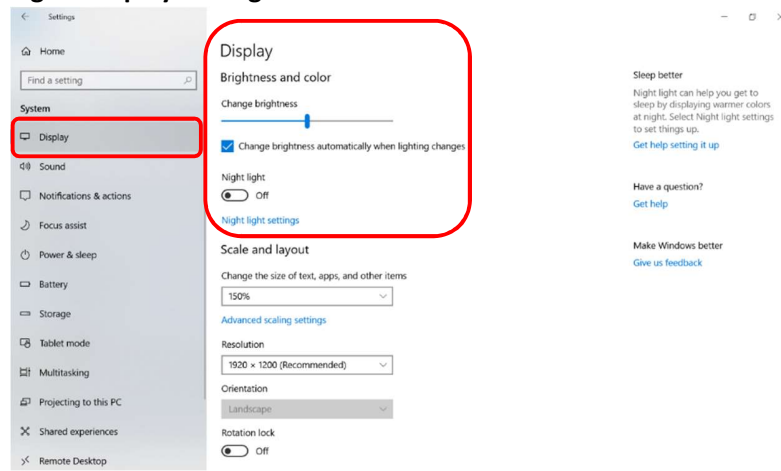
Fig. 1: Display settings
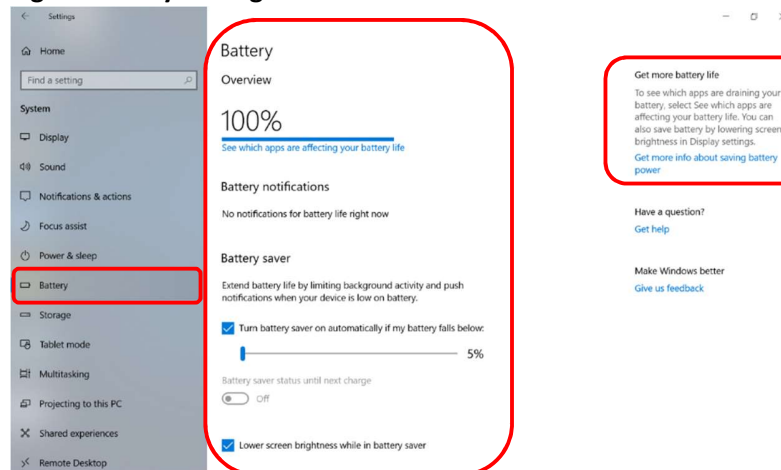

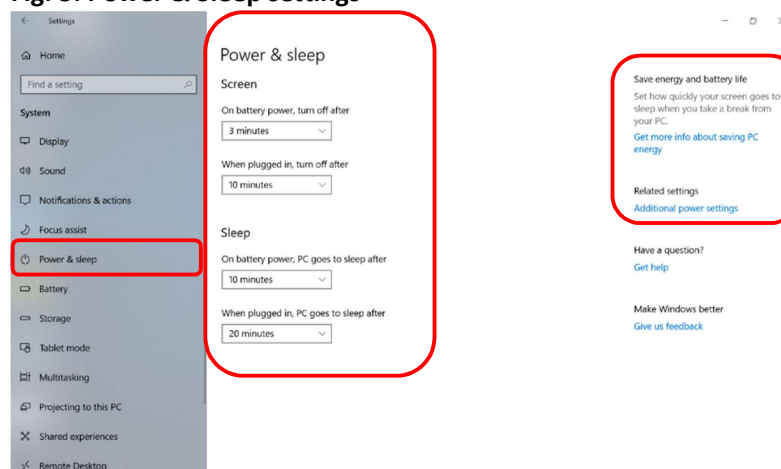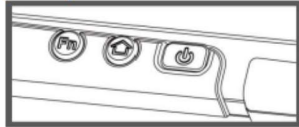
Fig. 2: Battery settings

Fig. 3: Power & Sleep settings

4. **What is HotTab and what do you use it for?**

HotTab is a tool that provides quick access to the tablet's functions and features. It can be accessed through the HotTab Utility icon on the right side of the screen or using the menu button on the front face of the tablet.

It has 4 main options:

- Shortcuts: to configure shortcuts to quickly access programs
- Camera: to take pictures/record videos and adjust camera settings
- Device ON/OFF: to enable/disable and do basic configuration of the device's hardware functions (WiFi, WWAN, GPS, Bluetooth, camera, LED indicators, Barcode scanner, RFID reader, and GPS antenna routing options)
- Setting: to access information about serial number, battery status and BIOS/HotTab/OS version.

Operating System and Software

5. **What Windows OS and versions will be available for Agile S NI?**

Only Windows 10 IoT Enterprise CBB will be available

6. **What is the difference between Windows 10 IoT Enterprise and Windows 10 Pro?**

In terms of software and usage, Windows 10 Pro and Windows 10 IoT Enterprise are the same. The difference is that they are sold through different Microsoft channels. Windows 10 Pro is a consumer or retail license; one you typically buy from a retail store. Windows 10 IoT Enterprise is an OEM (Original Equipment Manufacturer) version. OEM licenses usually come preinstalled on PCs from major manufacturers like Dell, HP, Lenovo, etc.; although these days they can also be bought separately.

In general, there are 3 main differences between consumer and OEM Windows:

	Consumer version	OEM version
Support	Direct technical support from Microsoft.	No direct technical support from Microsoft. Customer has to go through PC manufacturer.
License transfer	License can be used on only one computer at a time but can be transferred to other device.	License can be used on only one computer at a time and cannot be transferred to another device.
OS upgrades*	Can upgrade for free within a period of time after release of the new OS from Microsoft.	Cannot be used to directly upgrade from an older Windows operating system, the customer needs to buy a new license.

This point makes no difference for Agile S NI since it comes with the latest Microsoft OS available (Windows 10).

7. **Is the OS on Agile Series tablets developed by BARTEC?**
   No, our tablets are delivered with standard OEM Microsoft software. We do install our own OS image, which allows us to set up all our devices in a way that's most appropriate for its intended use, but the functionality of the OS is still that of a standard Microsoft OS. This means that, in general, questions regarding OS functionality (such as display brightness/resolution, language settings, power settings, battery settings, etc.) can be answered by referring to Microsoft's support homepage.

8. **Can the customer install their own OS image on Agile S NI?**
   Yes. For Windows 10, we can provide upon request the complete driver package and tools for creation of the customer's own operating system. For Windows 8, all drivers may not be available, please check with our technical support. Windows 7 is not supported by the BIOS version of Agile S NI, thus it cannot be used.

9. **What options are available for installation of OS?**
   It can be done via an external medium, such as a USB stick or hard drive, or through a Preboot eXecution Environment (PXE), a method that enables a client machine to boot from a server.

10. **What's the difference between CBB and LTSB?**
    LTSB and CBB are "servicing branch designations" (servicing options) for Windows. These aren't "editions" of Windows like Home, Professional, or Enterprise but they describe how updates are managed.
    LTSB stands for Long-term Service Branch. It is identical to versions of Windows where users receive Security Updates and bug fixes every month but no new features and enhancements will be installed. Also, Programs like Edge, Cortana, Store, Outlook Mail, Outlook Calendar, OneNote, Weather, News, Sports, Money, Photos, Camera, Music, Clock, and the Store are not available with LTSB. Minimum length of servicing lifetime of LTSB without OS version upgrades is 10 years.
    Now, if all the features from Windows are required, then a better option is a semi-annual channel (current branch – CB). CBB stands for Current Branch for Business. This version receives all upgrades (new versions) and updates (patches) from Microsoft within a few days of their release.

11. **What is BIOS and why is it relevant?**
    The Basic Input-Output System (BIOS) is an essential set of routines that is embedded on a chip on the motherboard and acts as an intermediary between the PC's hardware and its OS. Without the BIOS, the OS would have no way to communicate with, or take control of, the hardware. The BIOS is the first thing that loads when you start a PC. It initializes your hardware before booting the OS.
    The BIOS is relevant when the customer wants to install their own OS image or upgrade/change the OS on the tablet, as the required BIOS settings may vary from one OS to another. For example, for Agile X, Windows 7 runs on different BIOS settings than Windows 8/10, so you will need to adjust them appropriately to go from Windows 7 to Win 8/10. BIOS settings can also be

altered to optimize power consumption of the PC or to add another layer of security before booting up. However, these adjustments should only be done by a trained technician that understands the implications as there is the risk that the device will not boot again.

12. **What is TPM and what version is supported by Agile S NI?**

Trusted Platform Module (TPM) technology is designed to provide hardware-based, security-related functions. A TPM chip is a secure crypto-processor that is designed to carry out cryptographic operations, that is, protecting information by translating it (encrypting it) into an unreadable format. The chip includes multiple physical security mechanisms to make it tamper resistant, and malicious software is unable to tamper with the security functions of the TPM. Most PCs for the enterprise market are fitted with TPM. It is important for customers that manage sensible data, particularly in the case of mobile devices since they are more prone to be stolen. Agile S NI supports TMP 2.0, the latest version available.

1D/2D scanner

13. **How do I customize the configuration of the scanner engine?**

Agile S NI comes with a 1D/2D scanner from Honeywell (N660X series). Full configuration of the scanner engine can be done using EZConfig-scanning, a web based Internet Explorer application

from Honeywell, which comes preinstalled in our tablet. To access it, click on ⊞ and search for EZConfig-Scanning. For further details on scanner settings, please refer to the Agile S NI manual.

14. **What symbologies (barcode types) are supported by the scan engine?**

The following are the symbologies supported by Agile S NI:

TABLE 5. SYMBOLOGIES
Linear: UPC/EAN/JAN, GS1 DataBar, Code 39, Code 128, Code 32, Code 93, Codabar/NW7, Interleaved 2 of 5, Code 2 of 5, Matrix 2 of 5, MSI, Telepen, Trioptic, China Post
2D Stacked: PDF417, MicroPDF417, GS1 Composite
2D Matrix: Aztec Code, Data Matrix, QR Code, Micro QR Code, MaxiCode, Han Xin Cod
Postal: Intelligent Mail Barcode, Postal-4i, Australian Post, British Post, Canadian Post, Japanese Post, Netherlands (KIX) Post, Postnet, Planet Code
OCR Option: OCR-A, OCR-B, E13B (MICR)

Keep in mind that to optimize the performance of the scanner engine, some of these symbologies (usually the least common) might be deactivated by default. You can use EZConfig-scanning app to enable/disable specific symbologies.

15. **What is the reading range of the scanner?**

It depends mainly on the symbology, its size and quality (resolution, definition of the print), and also on other factors such as reflectiveness of the printing material, light conditions, etc.
See below some examples of reading range for Agile S NI scanner:

Symbology	Standard Range (Typical)		Sta
	Start (mm/[in])	Stop (mm/[in])	
C39 5mil	64 [2.5]	163 [6.4]	9
C39 10mil	28 [1.1]	338 [13.3]	7
UPC-A 13mil	46 [1.8]	419 [16.5]	5
C39 20mil	—	—	5
PDF 417 6.7mil	46 [1.8]	185 [7.3]	1
QR 20mil	—	—	4
DM 10mil	53 [2.1]	203 [8.0]	1

TABLE 6. READ RANGES [1]

[1] Barcode quality and environmental conditions may affect performance.

Note: QR codes can be read/decoded with the Agile S NI scan engine, but not when printed at a 20mil dimension or higher.

16. **What is mil (quality of barcode)?**

Mil is a unit of measurement of length width. It is equal to one thousandth of an inch (0.001 inch). When indicated next to a barcode type, it refers to the narrowest element (bar or space) in a barcode. This indicates the size of the barcode and it's also known as the X dimension. Barcode scanner manufactures use this measure when stating at what distance the barcode can be scanned. Whatever is "seeing" the barcode symbol (a barcode scanner) needs to discern the width of the smallest bar or space. A scanner that will read to as small as 10mils will not be able to properly read a symbol with an X dimension of 5mils. On the other hand, one that will read down to 5mils will have no problem with a 10mils symbol.

Fig. 4: Example of barcode sizes in mil

HF RFID reader

17. **How do I customize the configuration of the HF RFID reader?**

You can use the HotTab tool for basic set up such as the data entry form and trigger settings. For further configuration, you need to use the software development kit (SDK), which can be provided upon request.

18. **How do I figure out if the reader can read a certain tag?**

First you need to check for what standard the tag is designed. You can find this info on the data sheet of the tag. Then, refer to the table below to see if the standard is supported by the Agile S NI HF RFID reader.

Agile S NI - Supported HF RFID Standards
ISO 14443-A (Read/Write)
ISO 15693 (Read/Write)
ISO 18092 (Read/Write)

Keep in mind that some manufacturers design their tags based on a standard but still might make some special modification that may interfere with tag readability. For the majority of the cases, if the standard is supported, then the reader should be compatible with the tag, but ultimately the best way of ensuring this is by testing.

19. **What is the reading range for the HF RFID reader?**

Typically, not more than 10cm. Reading range depends on different factors with the most important being tag size or, more specifically, internal antenna size. The smaller the antenna of the tag, the shorter the reading range. Other factors include: installation surface (some tags are designed to be installed on a specific type of surface material, such as metal) and magnetic influences in the field.

Wireless communication features:

20. **What bands are supported by the 4G LTE module?**

The Agile S NI can be ordered with a Sierra MC7455 4G LTE module. This model is intended for use in the Americas and EMEA regions.

Alternatively, we can offer Sierra MC7430 4G LTE module for APAC and Brazil. However, keep in mind that the tablet itself may not have all the required Ex certificates and industry approvals to be sold in some countries of these regions. Please check with product management before offering.

The bands supported by both LTE modules are specified below:

	MC7455	MC7430
Target Region	Americas/EMEA	APAC
4G LTE		
Category	Cat-6	Cat-6
Frequency Bands	B1, B2, B3, B4, B5, B7, B12, B13, B20, B25, B26, B29, B30, B41	B1, B3, B5, B7, B8, B18, B19, B21, B28, B38, B39, B40, B41

21. **What is VoIP? Does Agile S NI support it?**

VoIP stands for Voice over Internet Protocol, it is the technology that converts your voice into a digital signal, allowing you to make calls from a computer, VoIP phone and other data-driven

devices. Agile S NI supports VoIP and only requires the installation of the specific application (Skype, WebEx, etc.).

22. **Can the customer use a Global Navigation Satellite System (GNSS) without Internet connection?**
Yes, Agile S NI comes with a GNSS module from u-blox (NEO-M8) that is independent of the WiFi module and thus internet connection is not required.

23. **What GNSSs are supported by Agile S?**
The GNSS module on Agile S NI supports GPS (US), Galileo (Europe), GLONASS (Russia), and BeiDou (China).