VTAP100

Integration Guide - VTAP100 IP-connected reader assembly with Bluetooth, Wi-Fi and USB

VTAP100-PRO-BW-OEM

Revised August 2025 v1.02

DOT ORIGIN

If you need help to set up or use your VTAP100-PRO-BW, beyond what is contained in this Integration Guide, then please contact our support team.

Email: **vtap-support@dotorigin.com**

Download the latest documentation and firmware from **https://vtapnfc.com**

Telephone UK and Europe: +44 (0) 1428 685861

Telephone North America and Latin America: +1 (562) 262-9642

If you have any feedback on setting up or using your VTAP100-PRO-BW or this documentation, then please contact our support team. The product is constantly being reviewed and improved and we value feedback about your experience.

Dot Origin Ltd
Unit 7, Coopers Place Business Park, Combe Lane, Wormley
Godalming GU8 5SZ United Kingdom
+44 (0) 1428 685861

Contents

Safety instructions

WARNING: INTENDED USE

The VTAP100-PRO-BW equipment is intended for use by suitably qualified integrators, who will integrate the VTAP100-PRO-BW-OEM (PCBs) into their own hardware, without any changes or modifications to the VTAP100-PRO-BW-OEM device. (An optional enclosure can be supplied.) Components mounted on the VTAP100-PRO-BW PCBs are not user-serviceable and an assembly of two boards should never be separated. Product safety has been tested to comply with IEC 62368-1.

WARNING: ESD PRECAUTIONS

We recommend careful handling and storage of Electrostatic Sensitive Devices (ESDs) during installation. The VTAP100-PRO-BW-OEM PCBs should always be protected by static shielding bags for shipping or storage.

WARNING: POWER SUPPLY - VTAP100-PRO-BW

EMC emissions and immunity certifications are only valid when using the VTAP100-PRO-BW-OEM with the supplied cable, connected to a 5V USB port or power adapter.

WARNING: FCC COMPLIANCE

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and a human body.

If the identification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module, Contains FCC ID: 2A282-VTAP100G2 or Contains FCC ID: 2A282-VTAP100, in accordance with enclosed module ID.

Co-location of this module with other transmitters that operate simultaneously are required to be evaluated using the multi-transmitter procedures.

The host integrator must follow the integration instructions provided in this document and ensure that the composite-system end product complies with the requirements by a technical assessment or evaluation to the rules and to KDB Publication 996369.

The host integrator installing this module into their product must ensure that the final composite product complies with the requirements by a technical assessment or

evaluation to the rules, including the transmitter operation and should refer to guidance in KDB 996369.

WARNING: ISED COMPLIANCE

This device contains licence-exempt transmitter(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference, and

(2) this device must accept any interference, including any interference that may cause undesired operation of the device.

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and a human body.

L'émetteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

(1) L'appareil ne doit pas produire de brouillage;

(2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Cet équipement est conforme aux limites d'exposition aux rayonnements de la ISED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec une distance minimale de 20 cm entre le radiateur et un corps humain.

If the identification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module, Contains IC: 30458-VTAP100G2.

Si le numéro d'identification n'est pas visible lorsque le module est installé à l'intérieur d'un autre appareil, alors l'extérieur de l'appareil dans lequel le module est installé doit également afficher une étiquette faisant référence au module fourni,
Contient IC : 30458-VTAP100G2.

1 Using this guide

This guide is for first-time users of the VTAP100-PRO-BW-OEM reader board assembly.

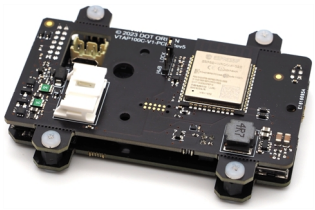


Figure 1-1 VTAP PRO BW OEM reader assembly

It contains the information you need to connect your VTAP100-PRO-BW-OEM hardware. If you have a VTAP100-PRO-BW reader that is intended to work in Cloud mode the majority of VTAP PRO reader installation is about ensuring the reader is powered and connected over Wi-Fi to VTAP Cloud. If it will operate in Local mode more configuration will be required. Beyond initial default operation, all information about configuration can be found in the User Guide for the VTAP100-PRO-BW.

If you need help beyond what is contained in the guides please contact **vtap-support@dotorigin.com**.

2 How a VTAP100-PRO-BW reader works

The VTAP100-PRO-BW reader is an NFC Wallet reader that offers a Wi-Fi connection to the Dot Origin VTAP Cloud and/or a local Bluetooth connection to a host device. The VTAP PRO reader from Dot Origin is an enhanced, IP-connected version of the popular VTAP100-USB reader.

The VTAP100-PRO-BW reader has two modes of operation:

- **Cloud mode** where this VTAP reader is managed and communicates through the VTAP Cloud service, using Wi-Fi and optionally some Bluetooth and input/output features; and
- **Local mode** where this VTAP reader behaves in the same way as more basic VTAP100 readers, with additional Bluetooth and input/output features.

In Cloud mode, the VTAP100-PRO-BW reader is connected only to a local power supply and to a **Wi-Fi network**. Whenever a mobile pass is presented, data is sent to the VTAP Cloud management platform, which can optionally be linked to a third party platform such as a loyalty platform. Responses to each mobile pass tap can be fed back to the user (or a local operator) via simple LED and beep signals, and/or switching an electrical device through the VTAP reader's I/O. Configuration and management of the device is performed via a companion online platform, called the VTAP Cloud. Using this service, you can configure the various mobile pass reading parameters (merchant IDs, private keys etc) and alter Wi-Fi settings. You also control the application, which determines how the VTAP PRO reader behaves when a user taps their phone, and where the mobile pass payload should be sent.

The VTAP100-PRO-BW reader also has a **2.4GHz Bluetooth v4.2 and BLE interface** that can be used to send mobile pass payloads as Bluetooth Low Energy (BLE) keyboard emulation, to a nearby host. (This can be used alongside the Wi-Fi connection in Cloud mode.) If Cloud connection is not required, the VTAP100-PRO-BW reader can be used with a local connection, as a Bluetooth host device, to receive barcode or QR scanner inputs.

Note: The VTAP PRO readers may be pre-configured, to suit our various customers and partners, so that demonstration units are ready to test. In some cases they are configured to work with our demonstration mobile pass platform, OriginPass, and in other cases they may be set up to use the customer's own passes and/or platform APIs.

Refer to the VTAP100-PRO-BW User Guide for more information about how to set-up and use the different features of VTAP100-PRO-BW in Cloud mode and Local mode, including setting up the Wi-Fi, switching between Cloud and Local modes, Bluetooth feature setup and using VTAP100 PRO I/O expansion board (VTAP100-PRO-EXP1) with a VTAP100-PRO-BW.

2.1 Default operation

2.1.1 Local mode

If the VTAP100-PRO-BW assembly was purchased for configuration in Local mode, then before anyone changes the configuration from its default, you can confirm that the unit is working.

These steps use a USB connection to demonstrate that the hardware can detect and interact with an OriginPass demo mobile NFC pass, which is ready to work with the default configuration of your VTAP100-PRO-BW.

1. If you don't already have one, obtain an OriginPass from Dot Origin by visiting **https://originpass.com/VTAP/** and add it to your NFC Wallet. (You will require a username and password - contact **vtap-support@dotorigin.com** to get these.)
2. Connect the VTAP100-PRO-BW to your PC, using a USB cable.
3. Open a text editor, such as Windows Notepad.
4. When you tap the OriginPass on the VTAP100-PRO-BW:
   - Pass contents will be displayed in the open text editor, through keyboard/barcode emulation.
   - The feedback LEDs on the VTAP100-PRO-BW PCBs will flash green.
   - Your smartphone may signal with a buzz or beep.

> **Note:** Some Android phones will only interact if their screen is on, although it does not need to be unlocked. You may need to enable NFC in the settings for the smartphone.

> **Note:** If the pass detected does not match the key and ID on the VTAP reader, or is moved away too quickly to be read, the pass contents displayed may be an 8 digit random hex string, such as '08E22AC1', different on each presentation. OriginPass contents will be a consistent string, such as '3~ffymeK9f_mziYtA6~53999301628695~Valued'. Any separator, such as '~' or '|', will depend on your keyboard language settings. (See VTAP Commands Reference Guide for option to ignore random UIDs if needed.)

> **Note:** If local security settings prevent or limit the use of removable storage devices, or the connection of additional keyboards, an administrator may need to alter those permissions.

2.1.2 Cloud mode

If the VTAP100-PRO-BW assembly was purchased for use in Cloud mode:

1. Before powering the device, please check that the chosen Wi-Fi network is available. This will be either 'VTAP' (with a password of 'passreader') or another SSID that you specified to our team in advance.

2. Power on the VTAP100-PRO-BW reader, by connecting the captive USB cable to a 5V USB port or power adapter. Always confirm the suitability of any power adapter before use.
3. You should see a steady red LED on the top of the VTAP PRO reader. This indicates that the device is booting up, which can take up to 10 seconds.

   When boot up is complete you should see the LED flash red while the device establishes a Wi-Fi connection. A steady blue LED indicates you have a successful connection to Wi-Fi and the Internet, and therefore to the Dot Origin cloud platform.

   Note: The steady blue LED will flicker every 30s in response to a heartbeat signal, giving visual confirmation it is still in communication with the VTAP Cloud.

   Continued LED red flashing signals a problem. Reconfiguring the Wi-Fi settings, if needed, is addressed in the VTAP100-PRO-BW User Guide, together with Cloud mode default LED behaviour.

2.2 Check status in BOOT.TXT

If you navigate to the VTAP100-PRO-BW in the computer's file system. It will appear as an attached mass storage device and list the files contained, including the BOOT.TXT file.

Inspecting BOOT.TXT will give you essential information about your VTAP100-PRO-BW set up, at time of last reboot, which might be helpful when troubleshooting.

```
VTAP100
Boot time: 2001/01/01 00:00:00
Firmware: V2.2.5.0
Storage: Dataflash
Status: 0
Hardware: 5.01
Expansion: VTAP100C-V1-a2
VCP enabled
NCI: 0471125005-8C00
Serial number: 563230-798AEC17D053C05ADE6F6C36C79A6B12
VTAP label: CC123456
API level: 4
AppKeys used: 123------
```

Figure 2-1 Example VTAP100 v5 BOOT.TXT file

You are most likely to need:

- 'Serial number' ('ATCA' on VTAP100 v4a or earlier) - the hardware serial number for your VTAP100-PRO-BW.
- 'VTAP label' (if set) - the assigned serial number for your VTAP100-PRO-BW, which matches that on its label. This will not show if not set.
- 'Firmware' - the VTAP100-PRO-BW core firmware version in use. You will find the latest firmware versions at **https://www.vtapnfc.com/download/**
- 'Hardware' - the VTAP100-PRO-BW hardware version in use.
- 'API level' - indicates which serial or OSDP API commands are supported.
- 'KeySlots used:' - Indicates the ECC private keys loaded on the VTAP reader, to access VAS or Smart Tap passes. Helps you check whether you have uploaded the necessary ECC private keys, which can be unclear as the files are deleted when they are uploaded. These two examples show how to read this information:
  - 'KeySlots used:------' shows that no keys have been uploaded.
  - 'KeySlots used: 12--56' shows that key files 1 and 2 have been successfully uploaded, in addition to the defaults 5 and 6.
- 'AppKeys used:' Indicates the application keys (if any) uploaded to the VTAP reader for any other applications, such as keys loaded to use with DESFire applications.
- 'VCP enabled', if included - indicates that the virtual COM port has been enabled.

- 'Status' - should be 0 if operating normally, anything else indicates an error state.
- 'Expansion:' shows the name of the expansion board connected to the VTAP, for example: 'VTAP100W' for a Wiegand expansion board, 'VTAP100C' for a VTAP PRO BW expansion board, 'VTAP100E' for a VTAP PRO POE expansion board.
- 'Boot time' - The time at boot, which defaults to 1970/00/00 00:00:00 if power is removed to reboot.

If the configuration has been locked the `BOOT.TXT` file will end with the words LOCKED S/W or LOCKED H/W.

2.3 Check status on VTAP Cloud platform

For readers that are on VTAP Cloud, looking on the VTAP Cloud platform is the easiest way to find out information about your VTAP100-PRO-BW, such as serial number and set up, which might be helpful when troubleshooting.

Go to **https://vtap-admin.dotorigin.cloud/** and use your login details to open the VTAP Cloud platform. (If you experience any difficulty contact **vtap-support@dotorigin.com**.) You will start on the **Readers page**, where you should see all your VTAP IP-connected readers listed by their unique serial numbers.

If you select the blue button  next to a reader you are interested in, you can view details about hardware and firmware versions in use, along with other settings, reader health and information about the most recent reader activity.

There is a VTAP Cloud User Guide where you can find out more about using the VTAP Cloud platform.

3 Mechanical installation

The VTAP100 reader board assembly for integration comprises two PCBs with an integral antenna in the lower board. Power is connected to the main board, through a cutaway in the expansion board on top.

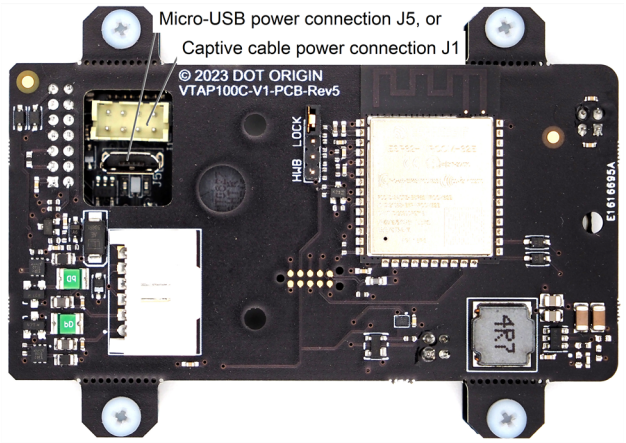


Figure 3-1 VTAP100-PRO-BW-OEM connection options for power

⚠ **WARNING:** Observe all **Safety instructions** when installing the VTAP100 PCBs.

3.1 Power

Connect the VTAP100-PRO-BW-OEM PCB assembly with **either** a MicroUSB to USB cable **or** a captive cable (as supplied with the boxed models) to a 5V USB port or power adapter.

The VTAP100-PRO-BW-OEM is rated at 5V DC (typ. 110mA, max 150mA) for power over USB.

⚠ **WARNING:** Do not power the VTAP100-PRO-BW-OEM reader assembly if the NFC, Wi-Fi or Bluetooth antenna is damaged. Components can reach higher operating temperatures than normal when an antenna is not attached, which could damage the VTAP reader and cause injury if handled.

3.2 Environment

The VTAP100-PRO-BW-OEM assembly must be stored and operated under the following conditions:

- Ambient temperature -25 to +70°C (-13 to 158°F)
- Humidity 0 to 95% RH non-condensing
- Pressure 86-106kPa

CAUTION: Always ensure sufficient clearance between the VTAP antenna and other RF transmitters, to avoid electromagnetic interference between equipment. Clearance required varies between antennas, depending on antenna size, power and sensitivity.

3.3 Mounting points

The PCB has 2.7mm diameter mounting holes, suitable for an M2.5 screw, spaced 50mm apart for fixing the unit. These will come with screws in place to hold the two boards of the assembly firmly together, but can be replaced with longer screws to connect the assembly into your housing.

CAUTION: Replace only one screw at a time, to keep the boards in contact at all times, if you need to replace the screws which hold the boards of an assembly together. Separating the boards of an assembly will invalidate your warranty.

Use 4 M2.5 nuts and bolts to mount the board securely.

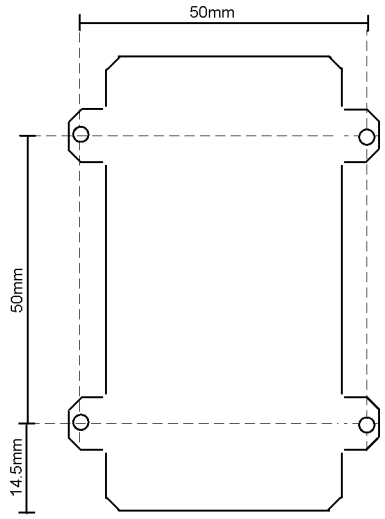


Figure 3-2 VTAP100 assembly mounting holes

The NFC antenna, which is in the lower PCB of the assembly, should not be mounted more than 10mm deep within your enclosure (measuring from the antenna surface to the enclosure surface), so that a user's smartphone will be able to come close enough to the antenna for reliable reading.

The antenna position should be clearly marked and easily accessed, so that users can position their smartphone appropriately. Be aware that antennas are positioned differently in different makes of smartphone. Apple iPhones often have antennas near the top and Android phones are more likely to have an antenna in the middle.

There is an engineering drawing you may find useful at Annex A.

CAUTION: Mounting a VTAP board near metal can reduce performance of the VTAP100-PRO-BW, because metal can distort the NFC field and Wi-Fi or Bluetooth coverage. Never allow a metal surface between the VTAP100-PRO-BW and the user's phone or card. If you have to mount the VTAP100-PRO-BW near metal, you should ensure the separation is:

- at least 25mm separation between the VTAP PCB and any metal (in all directions).

Testing should be performed in the proposed mounting location, as other devices and structures in close proximity could affect pass reading performance.

3.4 Optional RS-232 connection

The PCB has a special connector J1 (an 8 pin, 2mm pitch header connector) which can be used to attach a captive cable with a matching crimp housing.

The standard connector fitted to the PCB is a Hirose DF11-8DP-2DSA male header plug with shroud. The matching crimp housing is the Hirose DF11-8DS-2C.

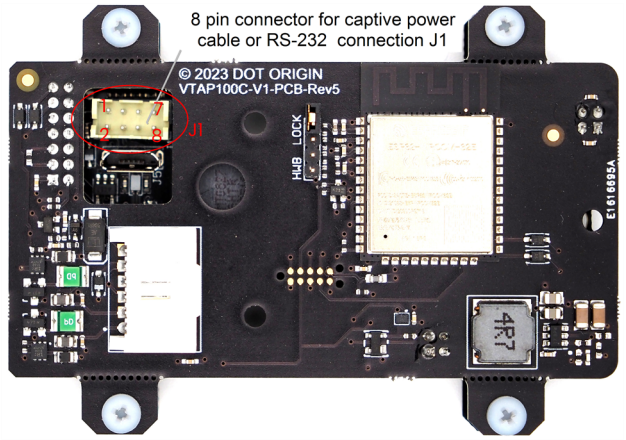


Figure 3-3 VTAP100-PRO-BW-OEM captive power cable or RS-232 J1 connection

The connector J1 includes both USB and RS-232 signals, as follows:

Pin	Function
1	GND
2	USB D+
3	+5V supply
4	USB D-
5	RS232 RXD (input)
6	Reserved (sense input)
7	RS232 TXD (output)
8	Reserved (sense GND)

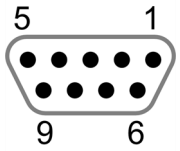


Figure 3-4 Typical RS-232 cable

A typical RS-232 cable has the following DB9 female connector pinout:

Pin	Function
2	TXD
3	RXD
5	GND
9	+5V supply (if any)

A PC or terminal RS-232 connector is usually DTE (data terminating equipment), typically a male DB9 with transmit (TXD) on pin 3 and receive (RXD) on pin 2. The appropriate connecting cable is then a DCE (data communications equipment) female DB9. TXD and RXD pins are swapped between the DCE and DTE devices, so that the transmit pin on one connects to the receive pin on the other.

The VTAP100 requires a 5V power supply, but not all RS-232 devices have 5V on pin 9. Your options are:

- If your RS-232 connector provides 5V power on pin 9, disconnect the USB cable before making the serial connection, then power will be provided by J1 (pins 1 and 3) and the serial cable/host.
- If your RS-232 connector does not provide 5V power on pin 9, retain a USB connection in addition to the serial connection.

Some serial cables have a separate DC 5.5/2.1mm barrel connector to supply power. In these cables, typically, the centre pin is +5V and the outer barrel is GND.

3.5 Optional I/O connection

The PCB has a special connector J9 (a 6 way FFC connector) which can be used to attach a captive cable with a matching crimp housing.

This connector is provided to connect a VTAP100-PRO-EXP1 expansion board, which comes with a suitable connecting cable. It could also be used to connect your own external devices.

If you are using the signals for your own equipment, you need to be aware that the standard connector fitted to the PCB is a Molex 51382-0600 male receptacle housing. The matching crimp housing is the Molex 56134-9000 for 22-28AWG wires.

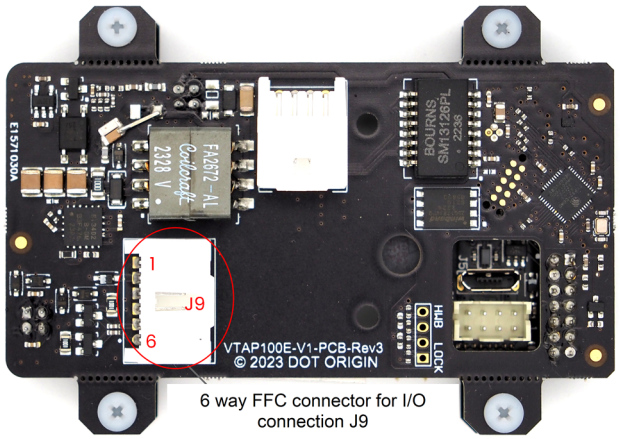


Figure 3-5 VTAP100-PRO-BW-OEM I/O J9 connection

The connector J9 provides the following signals:

Pin	Function
1	0V
2	5V In
3	Serial LED
4	Digital Input 1
5	Digital Input 2
6	Digital Output 1

3.6 USB connection

The USB connector is accessed through a cutaway in the daughter board, so you do not need to separate the boards. Disconnect the captive USB cable by pinching the connector and gently pulling it away from the socket on the board.

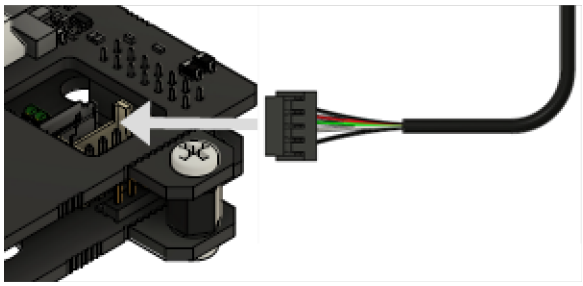


Figure 3-6 Captive cable USB connector accessed through cutaway in daughter board

4 Module integration instructions - FCC/ISED

The VTAP100-OEM reader board is the part of any OEM assembly which carries the NFC antenna. This has received FCC/ISED modular approval. In order to maintain this approval for your integration, you must follow the instructions in this section. If your equipment contains another RF transmitter, that works in conjunction with the VTAP reader, you may want to request an FCC Permissive Change approval based on the existing VTAP100-OEM modular approval. Contact us early in the process if you need help with FCC/ISED testing and permissive change.

The VTAP100-OEM reader board has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference.
(2) This device must accept any interference received, including interference that may cause undesired operation

These instructions must be followed to maintain the FCC/ISED approval for the VTAP100-OEM reader board, when it is integrated into a host system.

CAUTION: Changes or modifications made to the VTAP100-OEM reader board, that have not been expressly approved by Dot Origin Ltd could void the user's authority to operate the equipment.

4.1 Applicable FCC/ISED rules

The VTAP100-OEM reader board operates at 13.56MHz and is therefore subject to FCC/ISED rules for radio frequency devices.

4.2 Specific operational use conditions

The VTAP100-OEM reader board must be stored and operated under the following conditions:

- Ambient temperature -25 to +70°C (-13 to 158°F)
- Humidity 0 to 95% RH non-condensing
- Pressure 86-106kPa

4.3 RF exposure considerations

This reader board complies with FCC/ISED RF radiation exposure limits set for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and a human body.

Screened cable should be used, wherever possible, to connect VTAP100-OEM reader boards to other devices, to avoid interference from other equipment.

The end-user manual for the host equipment, that contains a VTAP100-OEM reader board, must clearly indicate the operating conditions to be observed, so that the user remains in compliance with current FCC/ISED RF exposure guidelines.

4.4 Antennas

The VTAP100-OEM reader board has been tested with its integrated loop antenna, printed on the PCB. There are no alternative antennas approved for use. If an external antenna is attached, the new arrangement would require a new FCC/ISED approval.

4.5 Label and compliance information

The integrator must attach a label to the new equipment, hosting the VTAP100-OEM reader board. As the VTAP100-PRO-BW-OEM itself contains an ESP32 module, which has its own modular certification, the label must mention both IDs in each case:

For FCC approval:
'Contains FCC ID: 2A282-VTAP100G2' and 'Contains FCC ID: 2AC7Z-ESP32WROOM32E'

For ISED approval:
'Contains IC: 30458-VTAP100G2' and 'Contains IC: 21098-ESPWROOM32E'

4.6 Information on test modes

The following test modes are recommended to achieve states of maximum emission levels or susceptibility in the VTAP100-OEM reader board:

1. VTAP100-OEM reader board powered on. Communicating with PC over USB. Continuously reading tag.
2. VTAP100-OEM reader board powered on and tag present, but not communicating with external device.

4.7 Additional testing requirements

The VTAP100-OEM reader board is only FCC/ISED authorised for use in compliance with the specific FCC/ISED transmitter rules listed on the grant. The integrator is responsible for compliance to any other FCC/ISED rules that apply to the host, which are not covered by the modular transmitter grant of certification.

The final host product, with the VTAP100-OEM reader board installed, will still require Part 15 Subpart B compliance testing, to evaluate transmission effects when the VTAP100-OEM reader board and host equipment operate at the same time. Be aware that additional testing can be required on the final integrated system. We recommend integrators refer to further advice from the FCC OET Knowledge Base, such as **996369 D04 Module Integration Guide v02**.

4.8 Maintaining Apple VAS(ECP1) or ECP2/Access compliance

There are some steps required in order to maintain Apple VAS(ECP1) and/or ECP2/Access compliance.

When you request an NFC entitlement and/or permission for an Apple Access deployment we recommend that you inform Apple that a Dot Origin VTAP OEM board or module has been used in your finished product. Apple are aware that our products are available both in finished form and as OEM modules.

- For VAS applications Apple reserves the right to review the final form factor of the reader, to ensure that satisfactory performance and user experience is maintained.
- For ECP2 applications it is essential that the new equipment hosting a VTAP reader board or module is tested and certified against Apple Access specifications. This includes ensuring that the read range meets their minimum distance requirements (40mm at various presentation angles, in Express and CDCVM modes) and that the reader is tested against all the different categories of iPhone and Apple Watch, as required by Apple. Apple may also require on-site functional testing as part of the end-to-end certification of an Apple Access deployment, which is usually conducted by the Credential Manager.

In both cases, our engineering team can advise and assist on certification issues, which could include taking a product through formal certification, if required.

5 Find your hardware version

If you need to report a problem with your VTAP100-PRO-BW or find the right reference diagram you will need to know your hardware version.

If you can connect your VTAP100-PRO-BW to a PC, you can easily check the BOOT.TXT file.

If mass storage is enabled on your VTAP100 PRO reader

If you navigate to the VTAP100-PRO-BW in the computer's file system. It will appear as an attached mass storage device and list the files contained, including the `BOOT.TXT` file.

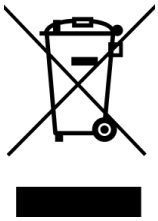
Inspecting `BOOT.TXT` you will find a number next to the word `Hardware:` such as `v5`. This is the Hardware version in use.

Alternatively, over a serial connection to the VTAP100-PRO-BW, sending the `?b` command will return the `BOOT.TXT` information.

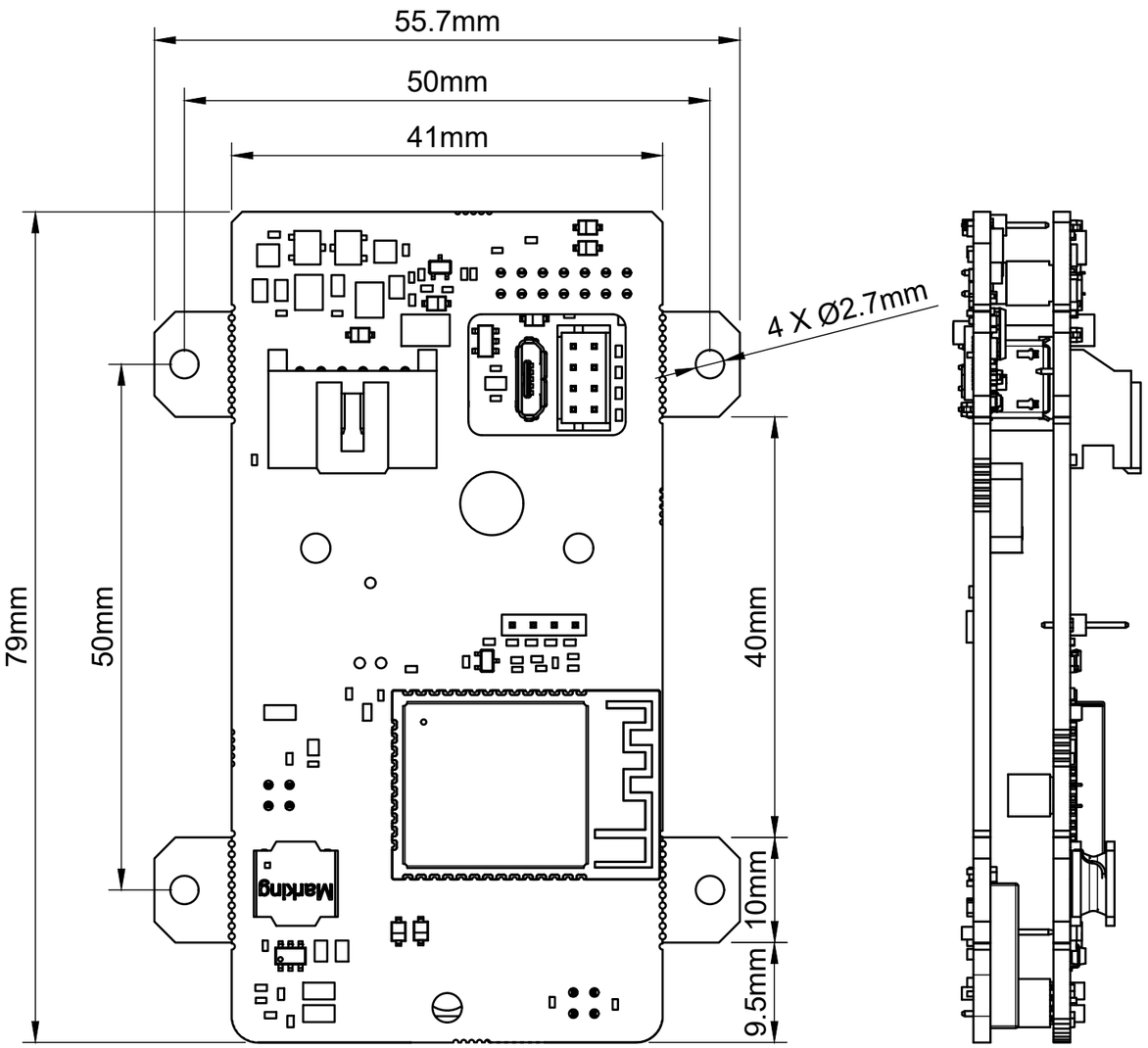
Or you can choose to View details () for your Reader on the VTAP Cloud Platform if it is in Cloud mode.

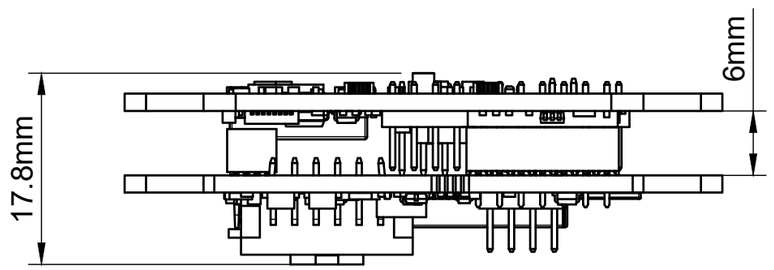
6 Disposal

For safety and sustainability, it is the responsibility of the integrator to ensure that when equipment containing a VTAP100-PRO-BW reaches the end of its life, it is recycled in accordance with WEEE Regulations within the EU.



VTAP100-PRO-BW (PCB assembly) should not be disposed of in general waste. If you wish to discard electrical and electronic equipment (EEE), please contact your supplier for further information.

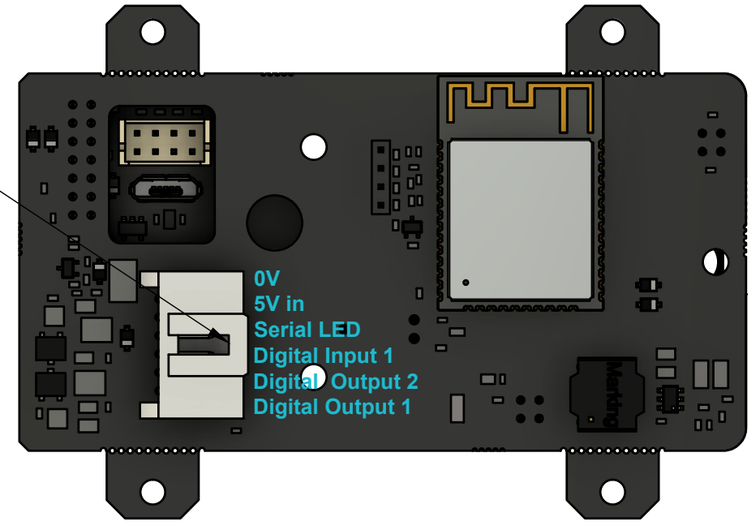


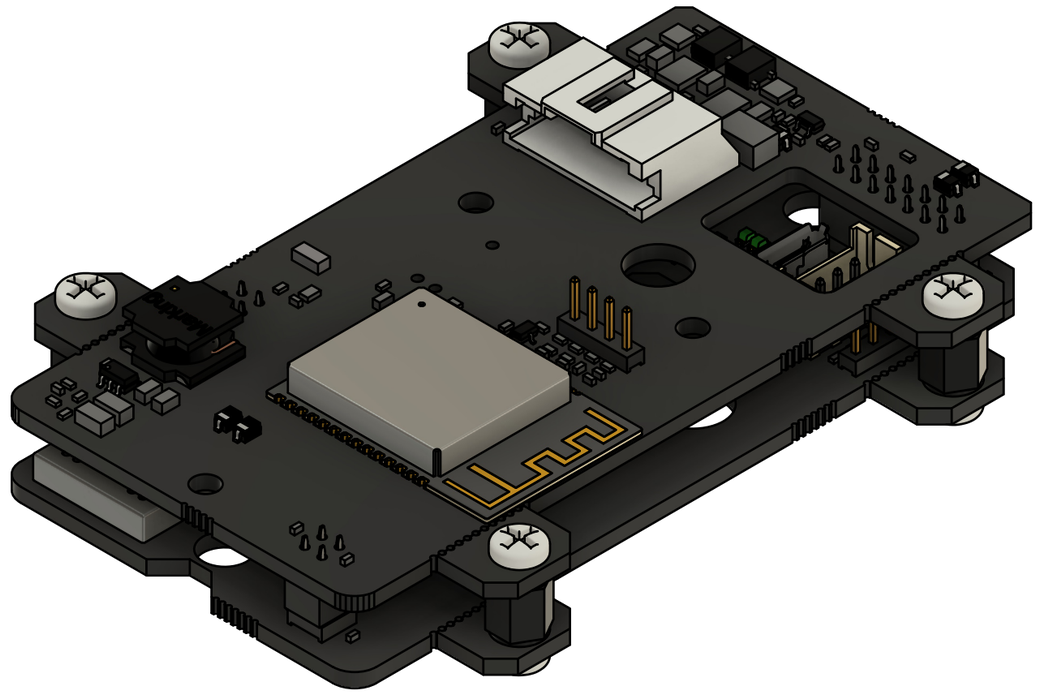


Mating Parts

Receptacle housing
Molex 513820600

Crimp (22-28AWG)
Molex 561349000





Title Appendix a. VTAP100-PRO-BW Reader Assembly		VTAP Model Ref. VTAP100-PRO-BW-OEM	
	DOT ORIGIN LTD Unit 7, Coopers Place, Combe Lane Wormley, Godalming Surrey GU8 5SZ, UK vtap-support@dotorigin.com +44 (0) 1428 685861	Drawing No.	Date 02/05/2025
		ECN	Created By M FARAZ
		Status Released	