

Mobile pass NFC reader – Cloud connected

USB & Wi-Fi connected, with VTAP Cloud service

Contactless reader for mobile phone passes, as well as popular RFID cards and tags. The VTAP100 PRO retrieves NFC wallet passes from iPhone and Android devices with a simple tap, then decrypts and transfers pass data to other local or remote systems, via USB, Bluetooth and/or Wi-Fi.

The VTAP100 is fully certified by both Apple and Google for VAS and Smart Tap native wallet protocols - no app required.

Use the VTAP Cloud online service to configure the VTAP100 PRO reader and route tap data to another system in real time, such as a membership, loyalty or ticketing platform. Stand-alone or hybrid connectivity options also possible.



Quick deployment

The VTAP100 PRO is designed primarily for mobile pass applications where direct cloud connectivity is required. It also reads popular contactless NFC and RFID cards and tags, to support mixed use applications and easy migration away from plastic. The VTAP100 PRO integrates into new or existing cloud platforms, for a smooth transition to an Apple and Google digital wallet card experience, and to enable new customer journeys located away from existing IT infrastructure.

Easy management

In cloud-connected mode, configuration of the VTAP100 PRO reader is via the VTAP Cloud online platform. The VTAP100 PRO reader can also operate in stand-alone mode, using USB or Bluetooth for local system connectivity, configured locally in the same way as other VTAP readers.

Powerful connectivity

This reader connects to local power and a Wi-Fi network, although USB output to POS systems is also supported. The VTAP100 PRO sends tap data to the VTAP Cloud platform, which routes the data to the chosen third-party system in real time. Responses can also be routed back to the reader, to control LEDs, buzzer and the optional expansion I/O box, for access control applications.

Strong security

VTAP readers and the VTAP Cloud service have been designed with security in mind, protecting the private keys needed to decrypt pass data and communications over Wi-Fi. All firmware updates are also encrypted.

Flexible form factor

The VTAP100 PRO is supplied in a compact desktop or wall-mounting case. It has a recess for a custom-printed front label, to suit application and branding requirements.

Other models offer different electronic interface options including USB, Wiegand, RS232 or RS485 outputs. A pre-certified OEM reader-board is also available for embedded applications.

Learn more on the VTAP website at <https://vtapnfc.com>.



VTAP100-PRO-BW-CC SPECIFICATION

For information on pricing and availability email vtap-sales@dotorigin.com

Physical characteristics	
Dimensions	97mm x 49mm x 40mm (3.8in x 1.9in x 1.6in)
Front label	Customisable - 41mm x 57mm (1.61in x 2.24in)
Power supply	Requires standard 5V USB port or power adapter
Mounting options	Can be securely counter- or wall-mounted; 2 x mounting holes in base plate
Weight	130g (4.6oz) including cable
Operating Temperature	-25 to +70°C (-13 to 158°F)
Operating Humidity	0 to 95% RH non-condensing
NFC interface	
Frequency/standards	13.56MHz, ISO 14443A/B, ISO 15693 and ISO 18092
Antenna(s)	Integrated 40mm (1.57in) square antenna
Read range	Typically 25mm (1in) depending on environment and phone/card/tag antenna
Mobile wallet compatibility	Apple Wallet NFC pass (VAS for loyalty/membership/ticketing plus ECP2.0 for Apple Access) Google Wallet NFC pass (Smart Tap, extensible, including generic private passes) Pass auto-selection, including Apple ECP1, ECP2 and Express Mode compliance; Mobile device type detection and inclusion; Multiple simultaneous pass IDs; ECC key auto-select; Apple enrolment URL and Google STUID capture, where supported.
Card/tag compatibility	MIFARE Ultralight, MIFARE Classic, MIFARE DESFire,ICODE, NFC Forum Types 2,4,5; UID/CSN reading as standard on all card types; Secure data reading on MIFARE Classic and MIFARE DESFire; NDEF record reading on Type 2 & 4 (Ultralight/NTAG and DESFire/HCE)
Other NFC modes	Dynamic tag emulation (text, URI, raw data) with smart write-back
Pass IDs	6 x Apple merchant IDs and 6 x Google collector IDs, if supported
Encryption key slots	6 x ECC key slots (for Apple & Google merchant IDs); 6 x Application key slots (DES or AES)
USB interface	
USB device types (can enable/disable as required)	USB Mass storage (for easy configuration, key loading & firmware updates) Human interface device (standard barcode reader/keyboard emulation) USB Virtual COM port (includes active, passive and file transfer modes)
Bluetooth interface	
Connectivity	2.4GHz Bluetooth 4.2 and BLE - cloud/local mode, HID BLE keyboard, HID classic host, dynamic BLE beacon. Supported on Windows, Linux, OSX, Android and iOS
Cloud connectivity and features	
Connectivity	IEEE 802.11 Wi-Fi - 2.4GHz, WPA to network/internet Supports multiple SSIDs and local hot-spot mode for initial configuration
Configuration features	VTAP Cloud service enables secure remote configuration of Apple and Google pass parameters, plus Wi-Fi credentials for individual readers and fleets of readers.
Application features	Every tap transaction is routed to an external target application, which can be selected and configured on a per-reader or per-fleet basis, either from an expanding list of pre-made applications or customised to call your own API endpoint.
Other features	
Operator feedback	Buzzer and LED provide both device status information (eg online/offline) and tap transaction feedback from target application (eg customised colour responses)
Input/Output options	Yes, via the optional VTAP100 PRO I/O Expansion Box
Compliance/Certification	
Apple VAS, Google Smart Tap, UKCA, CE, FCC (in progress), RoHS; 24-month limited hardware warranty	

FEBRUARY 2024
©2020-2024 DOT ORIGIN LTD



DOT ORIGIN