

cVEND box+ flex

Terminal for contactless payment & ticketing

- Tailored for transit, parking, vending and EV-charging applications
- Multi-Application architecture enables independent acceptance of contactless open-loop banking cards and closed-loop tickets
- Robust housing for smart installation in public areas
- Supports migration from closed-loop to open-loop
- Flexible secure Linux platform to develop own applications
- PCI PTS 5.x and EMVCo L1 certified



cVEND box+ is a member of the unattended cVEND contactless payment terminal family which is used successfully thousands of times in various applications around the globe.

The robust housing with EVA CVS compliant dimensions enables easy installation in multiple indoor and outdoor applications.

cVEND box+ is electrically and mechanically suitable for various unattended contactless only applications like Vending, Parking, EV-Charging and Transit. Due to the low power consumption and a special low-power standby mode, the device is ideal for battery or solar-powered applications.

cVEND box+ is fully approved for open-loop payment by EMVCo and PCI PTS. cVEND is VISA ready for Transit listed.

It's Multi-Application architecture supports open-loop contactless payment cards and mobile wallets from international and domestic payment card brands as well as closed-loop cards like MIFARE, CIPURSE, ITSO, VDV-KA, or Calypso with the same priority.

The cVEND specific secure Linux operating system together with an easy to use SDK and the cVEND multi-application architecture makes application development fast and easy.

The step-by-step upgrade concept enables migration from closed-loop to open-loop. Level 2 kernel packages can be upgraded later in field.

Its innovative security concepts with crypto plug-ins supports symmetric and asymmetric encryption, key-derivation and remote key loading and makes cVEND capable for PCI P2PE solutions.

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Technical Data

Housing	Polycarbonate, UL94 V0
Dimensions (W x H x D)]	
Overall	110 mm x 142.5 mm x 40 mm (EVA CVS comp.)
Visible	86 mm x 108 mm x 15 mm
Environmental conditions	
Operation	-30 °C to +70 °C
Storage	-30 °C to +80 °C
Humidity	5 % to 95 % condensing moisture resistant coating
Power Supply	
Voltage	12 to 42 V DC
Connector	MDB
Power Consumption	
Operation	Max. 8 W
Stand by	< 10 mW (Wake-up by digital input and time controlled)
User Interface	6 LED (4 green, 1 red, 1 yellow) internal multi-frequency Buzzer, illuminated Contactless Logo Graphical OLED display (yellow), 128 x 32 Pixel
Contactless Interface	ISO/IEC 14443-A / -B, ISO 15693 Support of contactless payment cards, mobile NFC devices in card emulation mode, MIFARE, Sony FeliCa and other contactless cards
SAM Interface	4 x SAM Sockets
Memory Expansion	microSD socket (SDIO/SD, V 2.0)
Peripheral Interfaces	MDB-Slave, Ethernet, RS232 (V.24), USB 2.0 Device and Host
Online Connection	Ethernet, IP over USB
CPU & Security	Secure ARM 9 CPU, real time memory en- ryption, cryptographic hardware acceleration and a true random number generator Tamper-proof hardware, protection against side-channel attacks
Clock	Real Time Clock – Battery backed
Memory	
RAM	128 Mbyte
FLASH	256 Mbyte

Battery 3 V Lithium Battery,
Lifetime 15 years at 25 °C

Conformity to standards

Payment Security	PCI PTS 5.x, SRED
Contactless	EMVCo Contactless Level 1 - V3.0a CEN/TS 16794-1:2017 Class D
Available Level 2 Payment Kernel	Mastercard contactless V3.1.4 VISA contactless V2.2. incl. transit V1.1 American Express - Expresspay 4.0.3 Discover D-PAS 2.0 JCB contactless 1.5 Union Pay contactless 2018 RuPay - qSPARC 2.0.0 PURE 2.1.8 CPACE 1.1 Bancomat contactless 2.2.0
Environment	RoHS 2011/65/EU
Vibration / Shock	IEC 60068-2-6, IEC 60068-2-27, EN 50155, IEC 61373
Protection class	
Impact	IK10
IP Code	IP65
Electrical Approvals	CE, FCC, IC, BIS, UKCA EN ECE – R10 (Automotive in conjunction with related components) ISO 10605, Category 3

Accessories

Development Devices, Tools and SDK on request