

cVEND plug TOPP

Terminal module for contactless payment & ticketing

- Flush integration into many applications in transportation, parking, vending, EV charging
- Suitable for solar powered solutions due to its low power consumption during sleep mode
- Easy vending machine / cash register integration
- Approved according to TA 7.2 and DC-POS 3.0 for girocard, credit / debit cards and mobile payments
- Approved by numerous German PSPs ("Netzbetreiber")



cVEND plug is a fully approved terminal for contactless payment with girocard and debit and credit cards.

cVEND plug is designed for flush integration in any kind of non-conducting front plates like ticket validators, driver consoles, kiosk-systems and many others.

The terminal, which has been approved by numerous network operators, provides a seamless integration thanks to its standardized ZVT and optional MDB cash register interface.

The low power consumption in standby mode allows the use in battery-powered vending machines.

Additional currencies and languages can be configured for operation outside Germany.

cVEND plug is designed and tested ready for use in vehicles.

The terminal is suitable for various unattended contactless payment applications such as Vending, Parking, EV-Charging or Transit.



Closed-loop cards (e.g. MIFARE, CIPURSE, ITS0, VDV-KA) can also be processed in parallel with credit and debit cards.

cVEND plug is optionally available with extension boards and housings for many applications:

Vending Extension Board

- MDB interface, digital I/Os
- Fixed amount system and coin acceptor emulation
- Age verification („girocard“ only)

SAM Extension Board

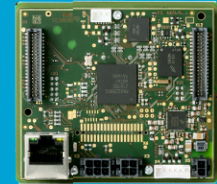
- 4 SAM sockets
- MicroSD Slot

Module housing

- Housing with low installation height for partially recessed mounting in plastic or glass fronts respectively
- Housing for surface mounting also on any kind of surfaces.

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Technical Data

Housing	Electronics module with plastics front element UL94 V0
Dimensions (W x H x D)	
overall	79 mm x 70 mm x 31,1 mm
visible	Ø 28,5 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	5.0 to 5.5 V DC
Power Consumption	
Operation	< 1 A, peripherals excluded
Standby	< 1 mA (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
Contactless Interface	ISO/IEC 14443-A / -B contactless payment cards, mobile NFC devices in card emulation mode, MIFARE, ISO 15693 and other contactless cards
SAM Interface	4 x SAM Sockets available with optional SAM Extension Board
Memory expansion	microSD Socket (SDIO / SD, V 2.0) with optional SAM Extension Board
Peripheral Interfaces	Ethernet, RS232 (V.24), RS232-LVTTL, USB 2.0 Device, MDB (with optional Extension Board)
Online Connection	Ethernet, IP over USB
CPU & Security	Secure ARM 9 CPU, real time memory encryption, 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, 540 mAh,
Lifetime 15 years at 25 °C

Conformity to standards

Payment PCI PTS 5.x, SRED
TA 7.2 Addendum 5, DC-POS 3.0 debit / credit

Contactless EMVCo Contactless Level 1
CEN/TS 16794-1:2017 Class D

Supported Payment Schemes
girocard Contactless
VISA Contactless (incl. V PAY)
Mastercard Contactless (incl. Maestro)
American Express Expresspay
Discover D-PAS
JCB Contactless
UnionPay QuickPass

Environment RoHS 2011/65/EU

Vibration / Shock IEC 60068-2-6, IEC 60068-2-27, EN 50155,
IEC 61373

Protection class (front, installed correctly)
Impact protection IK10
IP class IP65

Electrical Approvals CE, FCC, IC, UKCA
EN ECE – R10 (Automotive in conjunction with related components)
ISO 10605, Category 3

Terminalsoftware

Supported PSPs (alphabetical)

epay
Lavego
PAYONE
SIX
TeleCash
VR Payment

ECR Interfaces ZVT cash register interface via LAN (optional SSL / TLS encryption), USB or RS232
MDB and Fixed amount / coin acceptor emulation with optional Extension Board

Features ZVT-H Host-Protocol
Multi-Currency and Multi-Language support
Failsafe application and OP-System Update
Age verification (girocard only)