PAYMENT

FEIG ELECTRONIC

cVEND plug

OEM Terminal for Contactless Payment & Ticketing

- Designed for contactless open loop credit cards & closed loop public transport tickets
- Flush integration into validators, on-board computers and other devices
- Flexible secure Linux platform to develop own applications
- Low power standby mode for solar powered solutions
- PCI 5.1 and EMVCo approved
- Small footprint

cVEND plug is a member of the cVEND terminal family and brings contactless card reading, financial transaction processing and secure communications technologies together in a single, flexible product platform.

cVEND plug is designed for flush and almost invisible integration into non conducting front plates and is suited for public transport and parking applications like validators, driver consoles, parking meters and various other cashless devices.

cVEND is PCI PTS and EMVCo approved and supports contactless payment cards from MasterCard, VISA, American Express, Discover and RuPay as well as closed loop cards like mifare, ITSO, VDV-KA, calypso and cipurse.
Of course, mobile NFC wallets are supported for payment and ticketing.

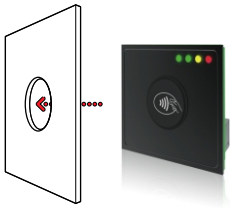
cVEND plug is designed for automotive applications and is electrical and mechanical tested according the related standards.

The low power standby mode makes it also suited for solar and battery powered applications.

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

Its innovative security concept with Crypto Plug-Ins supports symmetric and asymmetric encryption, key-derivation and remote key loading mechanisms and makes cVEND capable for E2EE solutions and all common secure payment protocols.

For ticketing applications an optional extension board with 4 SAM sockets and one socket for µSD memory cards is available.

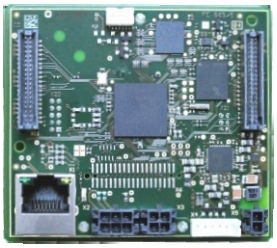


Smart Integration into Bus Validators, Driver Consols and Turnstiles

The module with the small footprint for flush and hidden integration into non conducting environments.

Product Detail	cVEND plug
Dimensions (W x H x D)	79 mm x 70 mm x 37 mm (visible Ø 28.5 mm)
Housing	non, plastics front element with back-lit contactless symbol
Protection Class (Front Side)	IP 65
Impact Protection Class	IK 10 (installed in equivalent robust housing)
Vibration / Shock Proved	IEC 60068-2-6 / IEC 60068-2-27 class 5M3
Temperature Range	
Operation	-30 °C up to +70 °C
Storage	-30 °C up to +80 °
Humidity	5% to 95% (non condensing)
Supply Voltage	5 V DC
Power Consumption (operation)	typ. < 1 A, peripherals excluded
Low Power Standby Mode	- Full operation ≤ 2 sec after wake-up - Power consumption < 1 mA - Wake-up by digital input or time controlled
Contactless Interface	- ISO/IEC 14443-A/-B in EMVCo mode - JIS X 6319-4 (Sony Felica) - Hardware enabled for NFC IP1 (P2P), NFC card emulation - 106 kBit/s to 847 kBit/s supported
Supported Transponders	ISO/IEC 14443-4 compliant smart cards, NFC devices in card emulation mode (Tag Type 1, 2, 3, 4), mifare classic, mifare ultralight, mifare ultralight C, mifare DESFire family
Peripheral Interface	Ethernet, RS232 (V.24), RS232-LVTTL, USB 2.0 Host and Device, SPI, I²C, optional RGB-bus interface for external TFT displays
User Interface	6 LEDs (4 green, 1 yellow, 1 red); illuminated contactless payment logo; multiple frequency buzzer
CPU and Security	Secure ARM 9 CPU with true random number generator and cryptographic hardware acceleration - RAM 128 MByte (256 Mbyte optional) - FLASH 256 MByte (512 Mbyte optional) - Real time clock - battery backed
Operating System	- Secure LINUX with cVEND Multi-Application architecture - Fail-safe update for OP-System and Application - Crypto Plug-Ins to protect sensitive data - Remote key loading
Payment Certifications	PCI PTS 5.1, SRED incl. Open protocol EMVCo Contactless Level 1, Version 2.6b
Certified Level 2 Kernels	American Express, Discover, MasterCard, VISA, RuPay qSPARC 2.0
Automotive Compliance	UN ECE - R10
Radio Approval	EN 300 330; FCC 47 CFR Part 15; IC RSS-Gen, RSS-210
EMC; Safety and Health	EN 301 489; EN 60950; EN 50364
Hazardous Substances	RoHS - 2011/65/EC

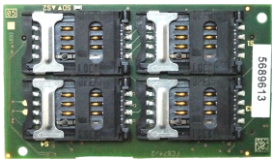
cVEND plug
Front view



cVEND plug
Rear view

Optional: cVEND plug SAM Extension (Piggyback Board)

Dimensions (W x H x D)	74 mm x 43 mm x 9 mm
Removable Memory	µSD socket (SDIO/SD, V 2.0)
SAM Interface (ISO7816)	4 x SAM socket for ID000 format (SIM-Card)



SAM
Extension Board

Stand of information: September 2019.
The information in this document is subject to change without notice and shall not be construed as a commitment.

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