FEIG

cVEND box+ II - Platform for App Development

TERMINAL FOR CONTACTLESS PAYMENT & TICKETING

- Tailored for parking, vending, EV-charging applications and transit

- Low-power sleep mode for solar-powered machines with wake up through card detection

- Multi-Application architecture enables independent acceptance of contactless open-loop banking cards and closed-loop tickets

- Robust housing for smart installation in public areas

- Flexible secure Linux platform to develop own applications

- PCI PTS 6.x

cVEND box+ II is the powerful PCI PTS 6.x certified next generation and backwards compatible successor of the cVEND box+ first generation, which has been used successfully in thousands of indoor and outdoor projects.

The robust housing with EVA CVS-compliant dimensions, MDB interface and 4 SAM sockets make cVEND box+ II ideal for vending machines, parking garages and public transportation.

cVEND box+ II is designed 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+ II is based entirely on the proven cVEND plug II platform and fully approved for open-loop payment by EMVCo and PCI PTS.

The cVEND.OS Multi-Application architecture supports open loop payment cards and mobile wallets as well as closed-loop cards like MIFARE, CIPURSE, ITSO, VDV-KA, or Calypso with the same priority.

Due to the secure infrastructure provided by FEIG and its security architecture with crypto plug-ins for symmetric and asymmetric encryption, key derivation and remote key loading, cVEND box+ II is suitable for PCI P2PE solutions.

Depending on your needs cVEND box+ II can be supplied in different software configurations:

cVEND box+ II.L2

With the L2 version, FEIG provides a terminal that is fully configured to customer requirements. This includes loading customer applications and keys in our PCI P2PE-certified key injection facility.

cVEND box+ II - generic

With the generic version, system integrators can load their applications and keys onto the terminal themselves or use FEIG's PCI P2PE-certified services for remote loading of applications and keys.

Technical Data

Housing	Polycarbonate, semi transparent, 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-repellant coating
Power Supply	
Voltage	12 to 42 V DC
Connector	MDB
Power Consumption	
Operation	Max. 8 W
Standby	< 10 mW
Wake-up	digital input, timer, card detection
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/IEC 15693
	Support of contactless payment cards, mobile
	NFC devices in card emulation mode, MIFARE,
	Calypso, Sony FeliCa and other
SAM Interface	4 x SAM sockets ID000 format, EMVCo L1
	compliant, voltage class A, B, C
	T=0 and T=1 protocol,
	1 x microSD card (SDIO / SD, V 2.0) socket
Memory Expansion	microSD socket (SDIO/SD, V 2.0)
Peripheral Interfaces	MDB-Slave, Ethernet, RS232 (V.24),
	USB 2.0 OTG, USB Host
Online Connection	Ethernet, IP over USB
CPU & Security	Secure ARM Cortex-A7 CPU up to 1 GHz with
	real time memory encryption, cryptographic
	hardware acceleration, true random number
	generator, tamper-proof hardware
Memory	RAM 512 Mbyte, FLASH 1 GByte
Operating System	Linux based cVEND.OS
Clock	Real Time Clock – Battery backed
Battery	3 V Lithium Battery, 550 mAh,
	Lifetime 15 years at 25 °C

Standard Conformity

Payment Security	PCI PTS 6.x SRED
Contactless	EMVCo Contactless Level 1 - V3.1a
	ISO/IEC TS 24192 (STA 3.1)
Available Level 2	Mastercard contactless V3.1.4
Payment Kernel	VISA contactless V2.2. incl. transit V1.1
	American Express - Expresspay 4.2
	Discover D-PAS 2.0
	JCB contactless 1.6
	UnionPay contactless 2018 transit and overseas
	RuPay - qSPARC 2.0.1
	PURE 2.1.8 e.g. for mada & Bancomat mobile
	Bancomat contactless 2.2.0
	CPACE 1.1 e.g. for Bancontact & Cartes Bancaires
	Interac
	eftpos (on request)
Environment	RoHS 2011/65/EU
Vibration / Shock	IEC 60068-2-6, IEC 60068-2-27, EN 50155,
	IEC 61373
Protection class	
Impact	IK 10
IP class	IP 65 (front side)
Electrical Approvals	CE, FCC, IC
	EN ECE – R10, ISO 10605 Category 3

Product Versions

Software Configurations

L2-Custom	Configuration with customer App and Key
	loading in secure FEIG production facility
Generic	Secure device designed for local or remote
	application and key loading

Accessories

Software Development	SDK, Development devices, Tools and related
	services