

## vBox2 2G

### DESCRIPTION

vBox is a IoT device for data collection from vending and coffee machines (VM). vBox2 transmits collected data over cellular network to Vendon Cloud. Device firmware is preloaded and managed centrally using Over-The-Air technology. vBox2 supports user (operator) interaction via function button. User operations are confirmed with sound signals. Device status indication LEDs are located on front panel. vBox2 device is designed for installation inside VM.

### vBox2 PACKAGE CONTENT

- 1x vBox2 device programmed with latest firmware version
- 1x cellular antenna
- 1x C1 Cable, various possibilities
- 1x C2 cable, optional, various possibilities

### vBox2 FUNCTIONALITY

Major VM and CM communication protocols supported by vBox2: MDB, Executive, BDV, CCI-CSI – protocols between VM and payment devices, and other peripherals.

Audit data is requested by server. vBox2 collects audit data from VM or payment device and responds to server request with collected data. VM or payment device initiated event reports are pushed to server. vBox2 supports many audit protocols including

- DDCMP (audit data transfer over RS232)
- DEX-UCS (audit data transfer over RS232)
- MDB CGW (audit data transfer over MDB)
- Other proprietary standards and protocols

**Offline data** – data is stored in vBox2 in case of network interruptions.

### COMPATIBILITY

The majority of VM models are supported by vBox2. The functionality depends on the technical capabilities of VM and peripherals.



### MDB Master mode, Executive Master mode, CCI-CSI Master mode

vBox2 takes over the control of the peripherals and allow to connect Executive, CCI-CSI machines to MDB peripherals. This provides full transaction information in real-time and option to store prices in vBox2 and manage them on-line.

**MDB Communications Gateway (verbose mode)** real-time transactions and event information forwarding to server.

### MDB Remote Cashless, Executive, CCI-CSI Remote Cashless

vBox2 provides cashless device mode HTTP REST API (3<sup>rd</sup> party wallet or closed loop solutions may be implemented).

### MDB, Executive, CCI-CSI to Free vend mode

vBox2 tracks all free vend transactions in real-time.

### MDB Sniffer

vBox2 support non intrusive MDB connection where vBox2 only listens to VM's. It detects if payment devices are enabled. Many VM's provide real-time purchase info which will be captured.

# SPECIFICATIONS

## TECHNICAL DATA

### Device inputs and outputs

- 5x analog, digital I/O
- 1x 5V digital output
- 2x executive, MDB master
- 2x executive, MDB slave
- 2x RS232 (DEX-UCS, DDCMP and others)
- 1x USB Mini-B service port
- 1x cellular antenna (SMA)

### System components

- Built-in rechargeable LiPo battery
- Power supply: 12V-34V DC, 100mA-250mA, 9V-24V AC 100mA

### vBox2 size and weight

- Height: 98 mm
- Width: 108 mm
- Depth: 26 mm
- Weight: 134 g

### System environmental requirements

- Operating temperature: +10° to +40°C
- Relative humidity: 5% to 95% (non-condensing)

### Modem

- tri-band GSM/GPRS engine (900/1800/1900 MHz)
- GPRS multi-slot class 10
- SIM card (Mini-SIM) slot
- External antenna (SMA)

## CABLES AND PROTOCOLS

Supports one C1 and one C2 cable connection

Data protocol	vBox2 connector	Cable type
DEX-USC, DDCMP, CCI/CSI and other RS232 protocols, sensors	C2	DB9 (female) DB9 (male) TRS (male 6,35 mm) Other
Power, MDB, Executive, BDV	C1	MDB slave, master Executive slave, master

## COMPONENTS

