

# *Vending Terminal VtV-2000*



**VINCAS**

# VTV-2000 Vending terminal for virtual

**VTV-2000 offers the maximum possible flexibility to sell virtual products like vouchers, account charging, lotteries or tickets, no matter printed or loaded to ec-card or RFID smart cards. Multiple functions may easily be combined with less needed footprint in stores, airports, hotels or cantinas.**

**Self service prepaid mobile phone charging, train tickets, event tickets, lotto or any type of betting, eCouponing, Catering and many more...**

VTV-2000 is the ideal self service terminal solution when it comes to sell tickets, offering lottery, sports betting solutions or electronic account loading, like prepaid mobile phones or mp3 music or even video prepaid accounts. It is developed with the future in mind for non supervised internal environments, no matter those shops, malls, hotels, airports, or corporate cantinas. It may at any time be

adapted to almost any requirement, thanks to its modularity.

Its design is compact with a small footprint of only 70 x 40 cm and a stylish appearance.

There are huge possibilities of applications. So it may be used as information terminal, or as charging station for any event ticketing and access solutions, no matter contacted or wireless, buttons or smartcards shall be used. Charging of mobile phones or as ticket terminal for train or flight tickets with or without integrated RFID technology.

A whole variety of payment conditions are build in. User may pay by Cash (coins and/or bank notes) or by credit - and ec-card for online or offline payments.

The user interacts conveniently with the applications via the 17" touch screen, integrated at the frontside in portray mode. Other configurations like „button and touch“



# ual products

combinations may be integrated at operators options.

An audio/video package allows support agents contact directly with the customer at the push of a button.

The heart of the VTV-2000 is an industrial Pc, running with a very reliable Linux operating system. Besides it's superior safety features different applications can easily be integrated. The middle layer vending software VENDSOL takes care of all printers and payment modules, it also communications with external servers over a network setup. We currently support the MDB bus as well as cctalk protocoll for payment peripherals, but also USB and serial RS232 protocolls and hardware interfaces.

A maximum of 4 different printers (USB connected) can be integrated in the standard vending machine. Two printers can be combined with RFID transmitters for reading and writing of RFID tickets. As an option RFID coins or a smartcard stacker may be in replacement of the second dual printer module.

There are 4 computer bays available for up to 3 additional PC modules. All PC modules are smoothly exchangeable as all interconnections are on the frontside. This provides full flexibility, no matter for mirroring, for control of the 23" advertisement screen in the topper, for communications or even for solutions with a different operating software such like windows CE or XP.

The integrated Client/Server architecture on the Vendsol middleware allows always a simple integration at the highest available security levels.

## VTV accepting all payment methods

To fit various locations and conditions, the machine offers cash and cashless payment.

Payments in cash are accepted either with coins or bank notes. Whereas exchange can be given only in coins. The Vendsol middleware grants a variety of bank note value acceptances in relevance of values to be paid, not to overstress the exchange coins management.

Cashless payment methods are ec-Cash with PIN pad entry, online verification and transaction, but also the Geldkarte (a german version of cashless pursue) and major credit and debit cards (subject to regulation and accreditation).

Custom payment methods, based on smart- or RFID – cards are also possible. Here again the software API of Vendsol allows a quick customization.

VTV-2000 is also suitable to charge „limited market smartcards“. This opens a brand new and wide area of applications, like bonus systems, customer loyalty, ticket or prepaid food solutions in cantinas using the more then 60 million ec-Cards distributed in Germany.

It combines the closed payment system „chip-activator“ (s-card) with the open payment system of ec-Card/Geldkarte. The chip on those smartcards offers the needed storage functionality. By implementing this functionality, customer loyalty programs may be created, as well it may be used to store a ticket for entrance or train trips, parking or rebate programs. This applications are easy and understandable for the enduser. Almost everybody has nowadays a bank depth card like the ec-Card.

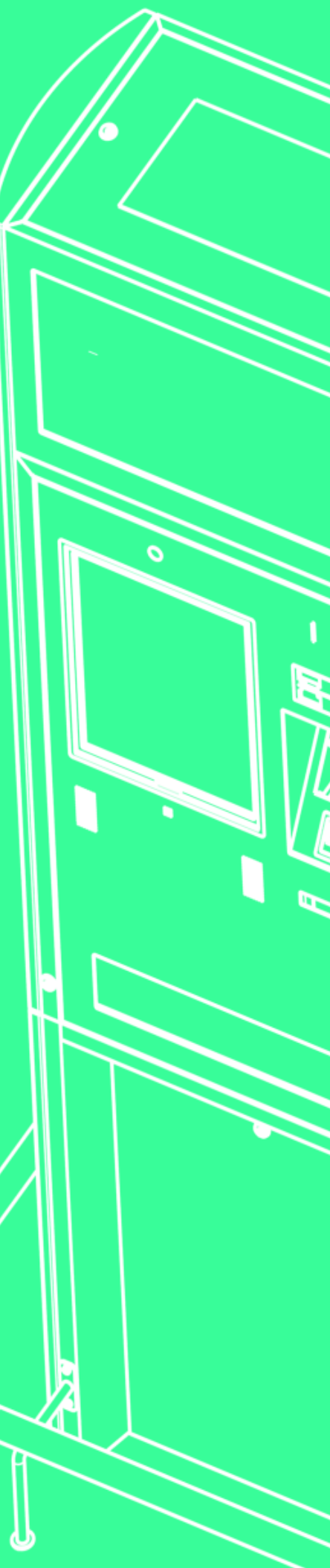
Even a biometric based fingerprint chip supported by the VeriAGE and VeriPAY system may be integrated for the utmost at security and customer convenience.

## Online connected

There is a wide choice of connectivity for the VTV-2000. No matter internal with an Intranet or Online with Internet connection. The connection may be realised by wire with an Ethernet cable or wireless, using WI-FI 802.11 b/g or n. Another option is the use of an UMTS/GPRS PCard to be totally independent from local internet connectivity.



# VTV-2000 Technical Data and Spec



## User Interface:

17" touch screen with resistive touch technology, covered by polyester designfoil, 1-colored printed frame in RAL7009. Laminated with aluminium frame. Touch is a 8 wire, based on 3M model 11079. Very good transmission and optical clearness with hardened glass.

### Alternative:

OFW/SAW touch 90% - 92% light transmissibility, Surface Acoustic Wave (SAW) with an resolution of 4.096 x 4096 pixel. 4mm hardened security glass, more then 50 mio. touch activities per pixel without failure. Fulfills G89633-1988 and 60950 © IEC 1999 steal bullet test, IP6x enclosure

### Alternative 2, only in combination with full glass front side:

Projected Capacitive Touchscreen which enables the device to sense through a protective glass over the entire front side of the VTV-2000. So the touch screen itself is nicely and frameless integrated in a super smooth nano-coated front side. This solution provides the highest levels of light transmission, excellent readability and unsurpassed protection against a wide range of physical threats. The Touchscreen is highly accurate, very dependable and offers a rapid response time of 13ms seconds.

## Enclosure:

Twofold construction design, consists of vending machine body and support underbody. In the underbody the industrial PC's, UPS (uninterrupted power supply) and power distribution is housed. The vending enclosure houses all payment modules as well as the up to four thermal printers. The frontside is covered either with a 2,5 mm nano-painted stainless steel plate or a 4 mm hardened security glass, also covered by nano-particle treatment to avoid finger touches.

Additional items are a topper housing for a 23" advertisement TFT flat panel with independent power supply integration and light housings on the left and right side of the vending machine, printable and customizable.

## Locking and security:

5-times interlocking system mechanism with security locking key.

## Dimensions and weight:

Width w/o sideparts:	60 cm
Height, without topper:	180 cm
Height, with integrated topper:	220 cm
Depth:	40 cm
Weight:	~ 170 kb

## Coin management:

Combo TC3 integrated subsystem with coin validator and up to two coin discriminators offering the utmost flexibility for the highest amount of different coins in a limited space environment. Each discriminator may pay out up to four different coins. The system is controlled via the cctalk interface by VENDSOL middleware. Each discriminator may hold up to approx. 400 coins each, or totally up to 800 coins. Also integrated is a forced-locked exchange cashbox.

### Alternative

Coin exchange system from different manufacturers, like Phoenix Mecano Zahlungssysteme or Ampasa. Combinations are possible with two additional hoppers or discriminators. An interface mix of MDB and cctalk is supported by the VENDSOL software.

## Bank Note acceptance:

GPT aurora with a 400 bank notes exchangeable cassette, lockable, 24 volt with MDB interface. All transactions are protocolled and stored on choiceable places.

## Cashless Payment:

Thales APU compact with integrated Hybrid-ec-Card- /Geldkarte reader unit and HSM Pin Pad Module. Accepts payments with ec-Card / Creditcard and Geldkarte with different customizable options for ticket issue or customer loyalty options. Cashless Payment may be subject to banking regulations and certification restrictions.

# ifications

<b>Printer System</b>	Up to 4 thermal printer (two plus two) are possible to be build-in..
<b>Printer 1:</b>	Graphical High speed thermal printer for paperrolls up to 80 mm diameter and up to 82,5 mm paper width. 150 mm/s max. autocutter, paper thickness from 56 til 150 um, blackmark detection. Ideal for receipts.
<b>Printer 2:</b>	Graphical high speed thermal printer for EURO/IATA tickets with leporello stack up to a height of 64 mm and 82,5 paper widthness, 150 mm/s max. autocutter, paper thickness from 56 up to 150 um (56 – 120 g/m2), Blackmark detection.  <b>Option:</b> Read-/Write transponder for integrated contactless Smart RFID papertickets for ISO/IEC 14443 A Mifare Classic, Mifare Pro, Mifare Prox. (Others on request)
<b>Printer 3:</b>	Graphical High speed thermal printer for paperrolls up to 120 mm diameter and up to 82,5 mm paper width. 150 mm/s max. autocutter, paper thickness from 56 til 150 um, blackmark detection. Ideal for receipts.
<b>Printer 4:</b>	Graphical high speed thermal printer for EURO/IATA tickets with leporello stack up to a height of 64 mm and 82,5 paper widthness or from paperroll with a maximum diameter of 150mm, 150 mm/s max. autocutter, paper thickness from 56 up to 150 um (56 – 120 g/m2), Blackmark detection.
<b>Smartcard disbursement and stacker:</b>	Smartcard disburser and stacker in exchange with printers # fj. A maximum of XX smartcards can be stacked, depending on thickness of smartcard.
<b>Power supply:</b>	230 V AC input, internal supply of 5V, 12V and 24 V
<b>UPS:</b>	optional for 400W
<b>Electronic Control:</b>	Integrated industrial personal computer in an optimized rugged enclosure, a choice of either Intel Celeron or Via Epic CPU, active or passive cooled. 2,5" rugged hard disk with shock mounting, 256 MB/ 512 MB storage. USB, MDB and Serial Interfaces integrated. PC card slot, USB hub.  Sensors for removable cashbox, front door, thermal conditions, shock. Activities of monitor, payment system. Remotely monitored via Internet and IP.
<b>Software middleware integration:</b>	VENDSOL 2.x. manages all terminal configurations, remote control TCP/IP, alarm functions and reporting. Controls payment modules either via MDB or cctalk protokoll, seriell or USB interfaces. Transaction and communication for ec-Cash payment with PIN-Pad. Integrates as blackbox cashless payment module by Thales. Export function of all relevant data in xml format. Editor for content administration Remote control via internet console Interfaces with web-browser. Database SQL, key-management multi-language.
<b>Application software packages available:</b>	Lotto 9 of 49 with integrated age verification Keno Prepaid Mobile Phone Charging for Vodafone, T-mobile, e-plus and O2 Deutsche Bahn AG ticketing <i>Planned:</i> Event ticketing
<b>Operating System:</b>	Linux 2.6.x and GTK 2.0+ graphics with hardware acceleration for portraid mode display



**PREPAID**



**TICKETS**



**LOTTO**



**BEZAHLEN**

# Options

## Advertisement Topper:

Advertisement - Topper with brilliant 23" UWXGA TFT Display for advertisement and information purpose. Controlled by a second industrial PC in the basement bay. This PC may also take over the communication with the server(s) and mirror mission critical content on it's hard disk. Optimized for video codecs „mpeg2“ or „mpeg4“, like „divx“ or „wmv“ and „flash“.  
The screen is nicely covered by a frameless and matching security glass. The topper has it's own 300 W power supply.

## Side Displays:

Illuminated side-displays, made of Makrolon or Plexiglas. Lighted with 4 neon lamps. Side-displays are backside printable.

### Alternative

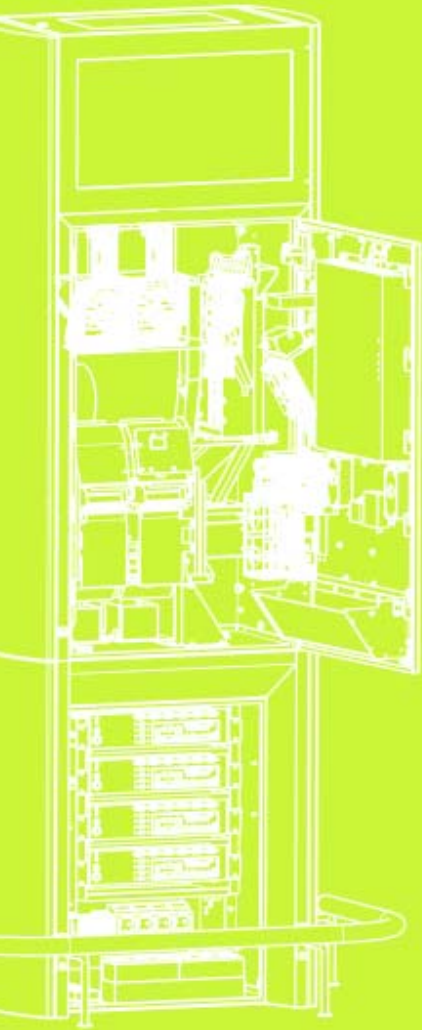
5mm Makrolon made sideparts, 3 segments of 70mm heights, Cold cathode /LED lighting system. Energy saving and very brilliant. Laser contured lightpipes for optical backlight transmission. Printable for brilliant picture - or logo display

## Cart protection guard:

Shopping cart protection may be optionally integrated to protect the machine against the impact of the shopping carts.

## Basic system configuration:

The basic system is without the advertisement topper on the top and the backlight sideparts. It consists of the vending machine chassis and the supporting chassis. Pictures may show optional items.



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# VINCAS



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