



PRODUCT SPECIFICATION

PRODUCT : HT2000 SERIES
DESCRIPTION : HYBRID TERMINAL
REF. NUMBER : SPEC0502
REVISION : A0

MANUFACTURED BY: ***POSIFLEX INC.***

AN **ISO-9001 & ISO-14001** CERTIFIED MANUFACTURER

6, WU-CHUAN RD., WU-KU

TEL: 886-2-22991599 (REP.)

<http://www.posiflex.com.tw>

(WU-KU INDUSTRIAL ZONE)

FAX: 886-2-22991819, 22991808

Email: posiflex@posiflex.com.tw

TAIPEI HSIEN, TAIWAN

1. OVERVIEW

1.1 SCOPE

This specification applies to the highly integrated PC based compact hybrid retail terminal HT2000. This series provides a panel size 12" TFT LCD of 180 nits or optional higher luminance. This series is powered by an AMD NX 1100 with low power consumption, therefore provides low noise environment. This series supports also an optional touch control panel over the LCD panel and a second VGA port. There is a cash drawer port and the UPS function integrated. There are various options applicable internally including: UPS battery, CF memory card reader, side mount integrated upgrade kit with options of optical finger print sensor and MSR with software controllable parameters, pole mount VFD customer display through USB port. The external options cover even much wider range including: Wireless LAN, Cash drawer, POS printer, Bar code scanner, Programmable keyboard etc.

1.2 FEATURES

- a) CPU: AMD NX 1100 HDD: 3.5" 20GB or up
- b) Support Win2000, WinXP Pro, WEPOS and Linux environment
- c) High quality 12" TFT active matrix LCD panel with 800 x 600 resolution (SVGA)
- d) **Vertical type LCD panel with easy tilt** angle adjustment from 42.5° to 77.5° and swivel angle from 0° to 16° clockwise
- e) Screw free easy maintenance and spill proof construction
- f) Various I/O ports supported, including:
 1. one PS/II KB port
 2. one PS/II mouse port
 3. 2 serial ports each with capability for +5V DC power support

 4. one parallel port
 5. 6 USB ports
 6. one LAN port 10/100 base T Ethernet
 7. one external VGA monitor port
 8. one PCI extension slot

9. one audio line output port
 10. one audio line input port
 11. one 4 pin lock type power input connector
 12. one UPS battery connector
 13. 1 CR port capable to control 2 cash drawer with drawer open detection
- g) **Preprogrammed timer wake up function**
 - h) **COM port MODEM ring up function**
 - i) **LAN wake up function**
 - j) **DDR SDRAM memory can extend to 2 GB in 2 modules**
 - k) VGA memory size program by software up to **128 MB**
 - l) Durable resistive type touch sensor for broad range of application
 - m) **Touch sound** can be enabled or disabled or adjust pitch by software control
 - n) One PCI extension slot
 - o) **Built-in UPS function** to support the system from intermittent power failure (battery itself is an option)
 - p) **Accidental power off protection** – The power switch is safely located at one side, and this power switch can be defined as a “ON” switch only through software command
 - q) Supports power saving by suspension or doze mode

1.3 MAJOR OPTIONS

- a) Optional model to be without touch panel
- b) 2.5” 2nd HDD
- c) CF memory card reader
- d) External CD ROM drive or DVD ROM drive in USB interface
- e) UPS battery
- f) 2 - in - 1 split cash drawer control cable
- g) SD-300 integrated to right side of LCD panel to contain optional optical dinger print sensor and MSR with software controllable parameters in USB interface.
- h) Pole mount 2 by 20 VFD customer display through USB port
- i) DRAM memory expansion up to 2 GB max.
- j) Audio amplifier and internal speakers

- k) Preload Win 2000, WinXP Pro, WEPOS, WinCE or Linux
- l) Wireless LAN adaptor in USB interface
- m) Programmable keyboard KB-6000 or KB-6200 or KB-6600

1.4 MODEL NUMBERS

MODEL	STORAGE DEVICE	TOUCH PANEL
HT-2012	CF Card	N/A
HT-2012H	CF Card	YES
HT-2212	HDD	N/A
HT-2212H	HDD	YES

2. GENERAL SPECIFICATION

2.1 CASHIER DISPLAY SPECIFICATION

Display Type	COLOR TFT 12" LCD
View area	246 mm x 184.5 mm (9.7" x 7.3")
Internal Interface	LVDS
Luminance	180 cd/m² standard; high luminance option
Control knob	Brightness
Resolution	800 X 600
Memory size	16 ~ 128 MB shared memory
Tilt angle	42.5° ~ 77.5°
Swivel angle	0° ~ 16° clockwise

2.2 POWER SOURCE SPECIFICATION

Power Source Type: 12 V DC power adaptor 60 W

Total Power Consumption	Normal	Maximum
Display used		
12" TFT LCD	45 W	60 W

2.3 SYSTEM SPECIFICATION

- CPU : AMD NX 1100
- DRAM : DDR266/333 128 MB (expandable to 2 GB) in 2 modules
- Can boot from HDD or optional CF card

2.4 LED INDICATOR

- Power ON / Standby LED: blue/orange dual color for system ON/OFF status, external power status, UPS battery monitoring (blue: power on; orange: stand by; flashing blue: operating on UPS battery power)
- LAN status LED: yellow/green dual color for link, communication (green: LAN link; steady green with flickering yellow: data transmission)

2.5 INPUT / OUTPUT PORT SPECIFICATION

- 1 X mini DIN 6 pin PS/II KB jack
- 1 X mini DIN 6 pin female PS/II mouse connector
- 1 X Sub D 15 pin VGA port for 2nd monitor display
- 1 X parallel port
- 1 X LAN port (Ethernet 10 base T and 100 base T)
- 6 X USB ports integrated in one connector
- 2 X serial communication ports. Both can supply DC +5V through pin 9 and DC +12V through pin 1 under overall power output limit. Default setting is standard RI and DCD signal input at these pins for both serial ports.
- 1 X cash drawer control port for controlling 2 x cash drawers
- 1 X UPS connector for 2.3AH/12V Lead Acid battery or above
- 1 X 4 pin mini DIN 12 V DC power input jack

2.6 OVERALL POWER OUTPUT LIMIT

- Including PS/2 KB & COM ports: +5VDC/1 Amp max.
- All normal USB: 5VDC/500 mA x 6

2.7 PRELOAD OS

- Win 2000, WinXP Pro or WEPOS

2.8 UPS SUPPORT (battery not included)

- Supports system operation for 8~15 min. depending on loading condition
- Orange LED turned on when adaptor power stand-by
- Blue LED flashes and system beeps when UPS battery starts working and discharging, and Blue LED fast flashes when UPS near to end
- UPS battery low status can be detected through COM1 status port

2.9 DC POWER ADAPTOR

- I / P : 110 ~ 240 VAC 50 / 60 Hz
- O / P : 12 +/- 1 V DC 5 Amp min.

2.10 SYSTEM POWER ON/OFF CONTROL

- One main power ON/OFF push switch at side, this switch can be programmed as “ON” only switch
- System can be waked up after each power off by any of the preset timer or a remote RS232 MODEM call or LAN wakeup packet
- System can be switched off by software command through local or remote program control
- Forced power off when switch is ON/OFF or when switch is ON only with prolonged effort
- Power OFF to ON duration: 10 seconds min.

2.11 AUDIO PORT

- 3.5 Ø mono jack for audio line in
- 3.5 Ø stereo jack for audio line out
- 30 db gain for microphone input
- Input impedance 64 KOhm
- Output impedance 280 Ohm
- Output power 50 mW / 8 Ohm
- Band width 20 Hz ~ 19.2 K Hz
- Output amplifier and internal speaker option

2.12 EXTERIOR SPECIFICATION

- **DIMENSIONS:**

BASE: 270 mm (W) x 240 mm (D) x 102.5 mm (H)
or 10.6” x 9.5” x 4.0”

PANEL: 288 mm (W) x 225 mm (H) or 11.3” x 8.9”

HEIGHT: Min. 288 mm @42.5 °, Max. 337.5 mm @72.5 °

PACKING DIMENSION: 424 mm (W) x 365 mm (D) x 390 mm (H)

- **WEIGHT:**

	NET WEIGHT	GROSS WEIGHT
HT2212	6.7 kgs (14.7 lbs)	8.3 kgs (18.3 lbs)
HT2212H	7.0 kgs (15.4 lbs)	8.6 kgs (19.0 lbs)

2.13 ENVIRONMENTAL SPECIFICATION

- **TEMPERATURE RANGE: (excl. UPS battery)**

Operating: 0°C ~ +35°C or 32°F ~ 95°F

Non-operating: -20°C ~ +60°C or -4°F ~ +140°F

- **TEMPERATURE RANGE for UPS battery:**

Operating: 0°C ~ +35°C or 32°F ~ 95°F

Non-operating: -20°C ~ +40°C or -4°F ~ +104°F

- **HUMIDITY RANGE:**

Operating: 20%RH ~ 80%RH, non-condensing
max. wet bulb 26°C (78.8°F)

Non-operating: 10%RH ~ 80%RH, non-condensing
max. wet bulb 28.9°C (84.0°F)

2.14 ACCESSORIES

- User's manual
- COM1 terminator
- Power adapter 12 V DC 5 A plus power cord
- Product Information CD or Recovery CD of preloaded OS

2.15 SAFETY APPROVALS

- Whole system is CE, FCC class A approved
(meet IEC61000-4-2/-3/-4/-5/-6/-8/-11)
- Power supply is UL, VDE approved

3 OPTIONS

3.1 CUSTOMER DISPLAY

- Pole mount on back cover
- Total height: 315 mm above base top of HT series
- 2 x 20 VFD
- Letter height: 9 mm in 5 x 7 format

3.2 MAGNETIC STRIPE READER

- ISO 2 tracks (track 1 + track 2)
- ISO 3 tracks (track 1 + track 2 + track 3)
- Characteristic parameters of ISO readers can be set via software
- Enclosed in SD300

3.3 OPTICAL FINGER PRINT SENSOR

- USB interface
- Detection area : 14.6 x 18.1 mm (nominal at center)
- Gray scale : 8 bits (256 levels)
- Resolution : 512 dpi (average x, y over the field)
- Enclosed in SD300

3.4 PROGRAMMABLE KEYBOARD

- PS/2 KB interface

	KB6000	KB6200	KB6600
Layout Structure	6 x 17		6 x 15
Total Keys	102		84
QWERTY Key	N	Y	N
Programmable Keys	89	19	68
Numerical Key	12		15
6 Position Key	N		Y
Single Key Size (mm)	19 x 19		
MSR	N		Option
W x D x H (mm)	358 x 147 x 65		346 x 210 x 57

3.5 DRAM EXPANSION

- DDR266 SDRAM or above in 2 sockets up to 2 GB max.

3.6 CF MEMORY CARD SLOT

- Compact Flash Type I memory card
- Configured as master device of secondary IDE channel

3.7 2ND HDD

- 2.5" type
- Configured as slave device of primary IDE channel

3.8 AUDIO AMPLIFIER

- Arranged on PCI riser card rev. C to cope with main board of rev. D
- Output audio power 1.0 W (in mono signal to drive 2 internal speakers)
- Bandwidth 350 Hz ~ 12 KHz
- Speaker load impedance 8 Ohm each

3.9 CD ROM DRIVE

- 24 X speed
- USB interface
- External slim type

3.10 UPS BATTERY

- 2.3AH/12V Lead Acid battery

3.11 SPLIT CASH DRAWER CONTROL CABLE

- Split cash drawer control cable CCBLA-238

3.12 WIRELESS LAN ADAPTOR

- USB interface
- IEEE 802.11g

3.13 EXTERNAL FLOPPY DISK DRIVE

- 3.5" 2HD/2DD
- USB interface

3.14 PRINTER:

a) PP-2000

- 2-station receipt/journal/validation printer
- Dot matrix 9 pin impact
- Bi-directional printing
- Auto cutter provides full cut and partial cut
- Auto-sense between RS232 and EPP interface

b) PP-5600

- Dot matrix 9 pin
- Bi-directional printing
- Friction type
- 40 columns for 16.9 CPI
- Accepts paper width 76 mm
- Prints on ordinary or up to 3-fold carbonless copy paper

c) PP-5700

- Dot matrix 9 pin receipt printer
- Bi-directional printing
- Sprocket type
- 28 columns (15 columns Chinese) or 35 columns (17 columns Chinese)
- 2 models for single pass or double pass print of Chinese characters
- 4.4 lines per second for single pass or 2.2 lines per second for double pass print
- 8 KB input buffer

d) PP-7000-III

- High speed thermal line printer up to 180 mm/sec
- High resolution 8 dots/mm by 576 dots/line

- Low noise high reliability
- Auto cutter provides single point partial cut
- Thermal sensitive paper roll at width 80 mm
- Supports UPC-A, EAN(JAN)13/8, ITF, CODE39, CODABAR printing
- Supports printing on label with marker on the other side
- Provides also Dark gray color option
- Compliant to UPOS 1.8

e) PP-7000U-III

- USB interface
- Everything else same as PP-7000-III

f) PP-7700

- Posiflex wireless connection
- Requires a Dongle DG2000 connected on COM port for host to control
- Everything else same as PP-7000-III except UPOS 1.8

4. RELIABILITY

- POWER ADAPTOR MTBF: 100,000 HRS
- TOUCH PANEL LIFE EXPECTANCY: 35,000,000 UP TOUCHES AT SAME SPOT
- LCD PANEL MTBF: 40,000 HRS FOR TFT
- HDD MTBF: 50,000 HRS
- MSR LIFE EXPECTANCY: 300,000 PASSES
- MAIN BOARD MTBF: 50,000 HRS
- POWER SWITCH LIFE EXPECTANCY: 50,000 STROKES