

List of iTerminal specifications

CPU	NetSilicon NET+ 50 <ul style="list-style-type: none"> - 32-bit ARM7TDMI RISC Processor - Integrated 10/100 Ethernet MAC - 44MHz - BGA Package
SubCPU <i>(not on iT-10)</i>	NEC 78K0 Controller <ul style="list-style-type: none"> - 8-BIT SINGLE-CHIP MICROCONTROLLER - 5.0-MHz operation with main system - 32.768-kHz operation subsystem clock - LQFP package
Display	Base Model, 2.8" diagonal, 128(W) x 64(H) dots. Liquid crystal display (BLUE LED backlight LCD). Operating temperature: -20°C ~ 70°C
Keypad	4 Function Keys 12 Numeric keys (not available on iT-10)
Network	10/100BaseT Ethernet® port, RJ45
Input/Output <i>(not on iT-10)</i>	4 inputs and 4 outputs (TTL level), to control optional board.
Internal Reader	<p>Magnetic reader DATA/CLOCK for: [Neuron C21001 dual track reader] Track-2 magnetic card stripe reader. The card can be swiped in both directions, up and down. The sensor is placed at the inner side. Custom C/D is supported on internal reader. Card detect sensor can be used.</p> <ul style="list-style-type: none"> - ANSI Track 2 default - ANSI Track 3 and 1 optional - JIS II <p>Wiegand for proximity reader All wiegand formats are configurable by script</p> <p>Serial F2F for barcode reader. Opticon; LBSAM12. The barcode reader can be visible-red or infrared type. The card can be swiped in both directions. Supported formats:</p> <ul style="list-style-type: none"> - Interleaved 2 of 5 (ITF) - Code 3 of 9 - NW-7 (Check digits are included)
Buzzer	3 Buzzers, no sound adjustment.
Led's <i>(not on iT-10)</i>	6 LED's, 2 LED's standard on board (OK,Error) and 4 additional external reader LED's can be controlled. The LED's and buzzers are controlled by subCPU 78K0.
External Reader	<p>Power: Depends on supplied P/S 100mA@5V (Directly from main PCB) 5V< and <24VDC (Directly from applied P/S)</p> <p>IN: DATA/CLOCK (most magnetic readers) Serial F2F (most barcode readers). Wiegand (DATA0, DATA1, most proximity readers)</p> <p>Out: Buzzer Led 1-2 Connection: Screw connector</p>
Serial ports	2 ASYNC Serial PORT extension (RXDB, TXDB) on TTL (5V) level 1 Port for communication 1 Port for reader extensions
Clock Accuracy <i>(not on iT-10)</i>	+/- 3 seconds per week (at ambient temperature 25 ±5°C) Use NEC 78K0 controller
Battery <i>(not on iT-10)</i>	Lithium battery. Used for RTC, backup is done in Flash.
Memory	16Mbyte SDRAM 4Mbyte FLASH, (or 8 MB on iT-60 serie)
Operating System	ThreadX

Debugging	ARM® JTAG ICE Port
Communication Protocol	XML based (HTTP), based on Amano's UDF specifications
Power	In: 5VDC on Net-X board. Please refer to the document 'Terminal power supply' for more details.
Operating Temperature	0°C ~ 45°C (Depends on reader) - Barcode: 0°C ~ 50°C - Magnetic: -10°C ~ 50°C - Proximity: -30°C ~ 65°C
Storage Temperature	-20°C ~ 50°C
Humidity	10%-Max 90%

List of iTerminal options

	Type	Hitag2	Mifare	Felica	Legic
IC Card Reader	<i>Input Volt [VDC]</i>	5±5%	5±5%	12±5%	5±5%
	<i>Consumption [mA]</i>	100	100	180	165
	<i>Temperature [°C]</i>	-10~50	-10~50	-10~50	+5~60
	<i>Humidity [%RH]</i>	30~80	30~80	30~85	30~85
	<i>Dimensions [mm]</i>	60x30x(15)	60x30x(15)	60x50	81.6x60
	<i>Antenna [mm]</i>	Board (60x54)	Coil (44x33)	Board (55x35)	Board (86x34)
	<i>Interface</i>	CMOS serial	CMOS serial	CMOS serial	RS232
Fingerprint	<ul style="list-style-type: none"> - Pressure sensitive type - Sensor Maker: BMF, Type: BLP100 - 256 x 384 dots, effective area; 16 x 23,4 mm - Dot pitch 0,058 x 0,058 mm - Interface, CMOS serial - 400 mA, 5VDC±10% - 10°C ~ 70°C 				
Power	<ul style="list-style-type: none"> - PS1 board 2: 100VAC-240VAC in - 5VDC out - PS2 board 1: 8-25VAC or 8-30VDC in - 5VDC out - PS3 board 4: 9-36VDC in - 5 and 12VDC out [DC/DC converter] 				
Internal modem	<ul style="list-style-type: none"> - Speed: 56 kbps - Country approval: USA, FCC [Europe, requires approval by agencies of the countries where modem is offered (contact R&TTE directive)]. - Connect to the serial connector. 				
RS232 board	<ul style="list-style-type: none"> - Connected to the serial port. (For service) - RJ11 - Half & full duplex 				
RS485 board	<ul style="list-style-type: none"> - Connected to the serial port. - RJ45 - Half & full duplex 				
I/O board	<p>The standard I/O board on TTL level:</p> <ul style="list-style-type: none"> - 2 Inputs, optic-isolated 5 ~ 24VDC In - 2 Outputs [Common, Normal Open OR Normal Closed], dry Contact outputs for connection to A class circuit, 2A@30VDC Max (DPDT) - Approvals: UL, CSA, VDE (CE-marking requirements) 				
Safety Standard	UL1950, EN60950 and CB attestation based on IEC60950				
EMC Standard	FFC part15, EN55022, EN61000-3 series, EN61000-4 series and CB attestation based on IEC55022.				