

CASIO®

HANDHELD TERMINAL

IT-9000

Handheld Printer Terminal

A Wide Array of Capabilities in A Single Terminal All-In-One Handheld Printer Terminal

- Thermal printer enables issuance of tickets, receipts, and other documents on the spot
- Equipped with an NFC reader/writer for contactless smart cards and ISO 15693 approved RFID tags
- The C-MOS Imager can read 1D and 2D symbologies with high speed and accuracy
- Fitted with a 2.0-megapixel digital camera with an auto focus function
- Includes a magnetic card reader for membership cards, credit cards and other cards

 Windows Mobile®  Bluetooth®

Functionality, reliability and usability in a single terminal.

The IT-9000 handheld printer terminal

The IT-9000 delivers multi-functionality to perform a variety of work operations in a single device.

A rugged body suitable for even demanding outdoor use, is equipped with a high-speed thermal printer and C-MOS imager for barcode reading.

In addition, the IT-9000 has enhanced the security features to prevent information leaks.

The IT-9000 provides total support to increase the efficiency of on-site business operations such as meter reading and traffic violation control.



ALL IN ONE

Integrated design that combines high operability and multi-functionality

High-Speed Thermal Printer

The IT-9000 has a built-in high-speed thermal printer that provides to print up to 28 lines per second* to dramatically boost work speed and efficiency. In addition, text size and fonts can be changed to suit the printer content.

*In the case of 1-ply roll paper, new batteries (fully charged), and room temperature operation



Built-In NFC Reader/Writer with SAM Slot

The IT-9000 is equipped with a reader/writer that supports NFCIP2, the latest short-distance wireless communication standard, and supports recognition of contactless smart cards such as FeliCa[®] and MIFARE[®] and ISO15693-compliant RFID tags (13.56MHz). A built-in antenna at the top of the device enables seamless interaction with the target smart card. SAM (Secure Access Module) slots comes as a standard feature for applications requiring a high level of security, such as prevention of unauthorised smart card use.



Built-In Magnetic Card Reader

The IT-9000 series MC25E model is equipped with modules for reading magnetic cards for membership cards, credit cards and other cards. The card reader improves efficiency in outside work by enabling workers to send server inquiries from the spot to obtain member information, employee ID information, and other data.

Built-In 2D Imager

The IT-9000 is equipped with a C-MOS imager that can read 2D barcodes symbologies. The imager also supports reading of GS1 DataBar, the newest barcode standard (barcodes and stacked codes).

A Variety of Expansion Features

USB connector

The terminal is equipped with a USB connector that supports USB host/client. This expands the range of use of handheld terminals by enabling connection with external devices or cradleless connection with a PC.

SD card slot

The terminal comes with two SDIO card slots (SDHC-compatible) as a standard feature for use in applications such as operation with a high-capacity stored database for backup data or expansion of user memory.

Bluetooth[®] 2.0 integrated as a standard feature

Bluetooth[®] Ver.2.0 (Class2) is integrated as a standard feature. This makes possible voice communication using wireless headsets.

[Contactless Cards]



Employee ID and other cards



- Member management, loyalty point management, and attendance management using membership cards, employee IDs, and other cards.
- The IT-9000 offers enhanced security for outside work operators by performing user authentication on log-in.

[RFID Tags]



- During meter reading the IT-9000 helps increase input efficiency and prevent errors by reading customer information from tags.
- Reading of registered vehicle information from tags makes possible use for applications such as managing traffic violations.

HANDHELD TERMINAL

IT-9000

Handheld Printer Terminal

OUTDOOR

Rugged specifications that support on-site operations

High-Resolution VGA LCD with Excellent Visibility for Outdoor User

The IT-9000 is equipped with a Blanview™ LCD, a 3.7-inch colour transmissive TFT LCD with an easy-to-operate touch panel. The display provides excellent visibility indoors and in direct sunlight, and VGA-compatible high resolution (640x480pixels) supports high-definition image display content. In addition, power consumption of the backlight is only about one-third that of semi-transmissive LCDs.



Keyboard Designed and Built for Comfortable Operation

The larger backlit keyboard ensures accurate key operation in a dark environment such as a warehouse. Since the keys are printed on the inside, the markings do not wear off. Text input using the number keys is possible.



2.0 Megapixel Camera with Autofocus

A 2.0 megapixel colour digital camera is integrated in the IT-9000. With its powerful autofocus feature, this camera can capture high quality images for such tasks as identifying damaged goods, document capture and vehicle license number identification. The capturing of digital images can be incorporated seamlessly into the work-flow of the application without the need to use a separate camera or reconcile images and data records from two different devices. The potential for enhancement to solutions, and increases in efficiency are virtually limitless.



Microsoft® Windows Mobile® 6.5

The IT-9000 series comes with Windows Mobile® Version 6.5 as the operating platform. This is the latest platform for mobile devices and PDAs and is ideally suited for use as a basis for an enterprise or business solution. Windows Mobile 6.5 brings you the latest enhancements to the PDA user interface, allows efficient handling of various wireless technologies and opens up the possibility to run existing commercially available packages and software for the Windows Mobile family of devices.

Excellent Environmental Durability

Casio designed the IT-9000 to deliver the usability required for outdoor work. The rugged body offers improved impact resistance to withstand drops of 1.5 meters, ensuring the high durability necessary for use even under conditions of rough handling. The terminal is compliant with IP54* dust and water-splash proof standards and designed to ensure trouble-free operation in demanding environments such as heavy rain and sandy or dusty places. In addition, it is suitable for use in sub-zero temperatures or under the blazing sun (operating temperature range of -20°C to 50°C).

*Water splashed against the device from any direction has no harmful effects when all covers for connectors, etc. are closed.



Drop durability test



Water-splash proof test



Dust proof test

Human-Centered Design in the Uncompromising Pursuit of Usability

The IT-9000 reflects human-centered design processes applied in product development in the uncompromising pursuit of ease of use. It is surprisingly compact and light in weight for a fully featured multifunctional handheld terminal with built-in printer. The terminal was designed to be comfortable to hold it for long shifts without fatigue and to provide excellent operability in outdoor environments. The rounded form of the lower part of the device and the 79-mm grip length make the IT-9000 just the right shape and size for a secure grip. The center of gravity is optimised to fit naturally in anyone's palm. The result is a device that places little strain on the hand even during long hour operation.

Human-centered Design	Objective	Enhancement of total product quality that customers experience
	Method	Product development based on ISO13407 (human-centered design) process
The Pursuit of Usability	Concept	Human-centered Design

SECURITY

Reliable security features to meet the needs of the times

Log-In Authentication

The IT-9000 supports smart card-based log-in security that prevents unauthorized use, by requiring log-in authentication using employee ID cards in addition to passwords.



Employee ID card

Enhanced Security Features

Automatic Erasure of Local Data

The terminal has a function for automatically erasing data if the user does not log-on at a specified time. This prevents information leakage in the event of device loss.

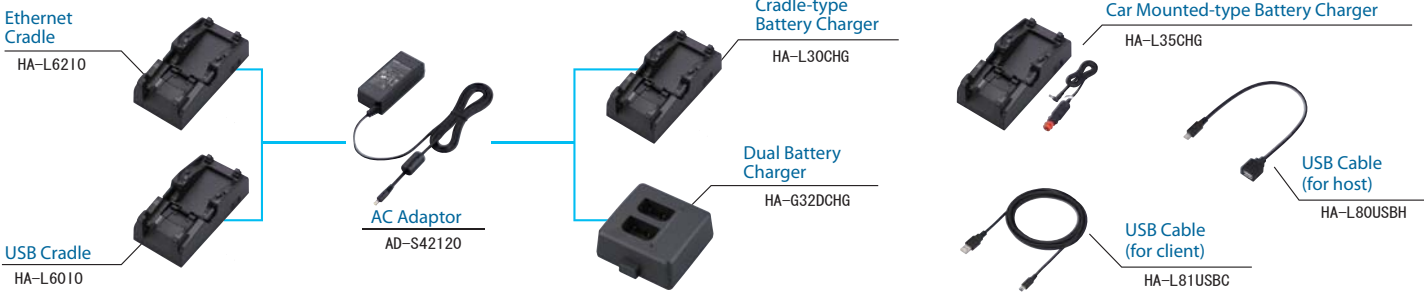
Media Security

A security lock can be applied to SD cards used to store data to block information leakage.

HANDHELD TERMINAL

IT-9000

Handheld Printer Terminal



Specification

Model Name		MC25E	C25E
CPU		Marvell PXA320 624MHz	
OS		Microsoft® Windows Mobile® 6.5 English Version	
Memory	RAM	256MB	
	ROM	256MB	
Display	Display	9.4cm (3.7inches) Blanview™ Color LCD with Touch Panel	
	Resolution	VGA (480 x 640 dots) 65,536 colors	
	Backlight	LED	
Indicator		Indicator 1: Battery charging status, Indicator 2: Operating status	
Printer	Printing Method	Thermal line dot	
	Paper Width	80 mm or 58 mm	
	Printing Width	72 mm or 48 mm	
	Speed	28 lines per second (while printing Kanji characters)	
	Paper	Roll paper, Label paper	
	No. of dots	576 (if printed on 80 mm width paper)	
	Font Type	ANK, Symbolgies (UPC-E, NW-7, Code39, Code128), OCR-B, user-defined characters x 128	
Sensor		Positioning for printing	
C-MOS Imager	Type	Wide VGA (752 x 480) Monochrome Area Sensor	
	Aimer	Laser 650+10/-5nm, 1mW or less	
	Resolution	1D: 0.15mm, Stacked: 0.169mm, Matrix: 0.25mm	
1D Symbolgies		GS1 DataBar Omnidirectional (RSS-14), GS1 DataBar Truncated (RSS-14 Truncated), GS1 DataBar Limited (RSS Limited), GS1DataBar Expanded (RSS Expanded), Code128/GS1-128 (UCC/EAN128), Code93, Code39, Code11, EAN8/13, UPC-A, UPC-E, Codabar (NW7), Interleaved 2 of 5 (ITF), MSI (Plessey), IATA, Code32, ISBT	
	Stacked Symbolgies	GS1 DataBar Stacked (RSS-14 Stacked), GS1 DataBar Expanded Stacked (RSS Expanded Stacked), GS1 DataBar Stacked Omnidirectional (RSS-14 Stacked Omnidirectional), Code49, PDF417, MicroPDF, Composite, Codablock F, TLC39	
Matrix Symbolgies		Aztec, DataMatrix, Maxicode, QR Code, microQR, Han Xin Code	

NFC Reader/Writer	Frequency	13.56MHz		
	Contactless Smart Card	ISO14443 Type A(MIFARE™), ISO14443 Type B / Felica™		
	RFID Tag	ISO15693(I-CODE™ SLI / Tag-it™ / my-d™)		
Wireless	Bluetooth	Bluetooth™ version 2.0 + EDR		
	Digital Camera	Imaging Element	2.0 mega pixels C-MOS	
Mag. Card Reader	Function	Auto focus, LED flash		
	ISO Standard	ISO Tracks 1, 2, and 3		
Input	Keyboard	Numeric (Alphabet) keys, Double zero key, - key, Decimal key, MENU key, Fn key, F1 to F4 keys, CLR key, BS key, ENT key, Cursor keys, Power key, Left Trigger key, Right Trigger key		
	Touch Panel	Plastic panel (resolution 480 x 640 dots) with character input pad		
Interface	Serial	USB (Host, Client) x 1		
	Card Slot	SDIO (SDHC supported) x 2		
Power	Audio	Microphone: Built-in (monaural), Speaker: Built-in (monaural)		
	Main Power	Lithium-ion battery pack: HA-G20BAT* * 7.4V/2,000mAh		
Environment	Memory Backup	Lithium battery (rechargeable) on board		
	Charge Time	Approx. 5 hours		
Dimension / Weight	Dust/Splash-proof	IP54 (compliant with IEC60529 standard)		
	Drop Durability	1.5m		
Dimension / Weight	Operating Temperature	-20°C +50°C		
	External Dimensions	W	112mm*	
		D	286mm	255mm
		H	66mm* 37mm**	
Weight (Incl. Battery)	655g			

● CASIO is a registered trademark of CASIO Computer Co., Ltd. in Japan.
 ● Blauview is a trademark of CASIO Computer Co., Ltd., in Japan.
 ● Microsoft, Windows Mobile are registered trademarks of Microsoft Corporation in the USA and/or other countries.
 ● MIFARE, I-CODE are registered trademarks of NXP B.V.
 ● Felica is a trademark of Sony Corporation.
 ● Tag-it is a registered trademark of Texas Instruments Incorporated.
 ● My-d is a registered trademark of Infineon Technologies AG.
 ● The BLUETOOTH registered trademark is owned by Bluetooth SIG, Inc., U.S.A., and licensed to CASIO Computer Co., Ltd.
 ● Other company and product names are generally registered trademarks or trademarks of the respective companies.
 ● Specifications in the table above are current as of March 2012, and may be changed without prior notice.