BHT-800 Series Specification

			Barcode Model			2D Model		
			Batch Model	Wireless LAN Model	Bluetooth Model	Batch Model	Wireless LAN Model	Bluetooth Model
Format			BHT-805B	BHT-805BW	BHT-805BB	BHT-825Q	BHT-825QW	BHT-825QB
OS			BHT-OS					
CPU			32 bit RISC CPU					
Memory (Flash memory)[※1]			32 MB (User file area approx. 21MB)					
Display	Size[※2]		QVGA (240×320 dot)					
	Display device		Liquid crystal dot matrix display (color)					
	Character	16 dot font	15 characters x 20 lines (full-width), 30 characters x 20 lines (half-width)					
	Display[※3]	24 dot font	10 characters x 13 lines (full-width), 20 characters x 13 lines (half-width)					
	Backlight		White LED					
Scanner	Method		Advanced Scan (CCD)			Area Sensor		
	Scan Codes	2D Code	—			QR Code, Micro QR Code, SQRC, iQR, PDF417, Micro PDF417, Maxi Code, DataMartix (ECC200), EAN.UCC Composite (GS1 DataBar Composite)		
		Barcodes	EAN-13/-8(JAN-13/-8), UPC-A/-E, UPC/EAN(with add-on), Interleaved 2 of 5, CODABAR(NW-7), CODE39, CODE93, CODE128, GS1-128(EAN-128), Standard 2 of 5, RSS(GS1 DataBar)			EAN-13/-8(JAN-13/-8), UPC-A/-E, UPC/EAN(with add-on), Interleaved 2 of 5, CODABAR(NW-7), CODE39, CODE93, CODE128, GS1-128(EAN-128), GS1 DataBar(RSS)		
	Minimum Resolution	2D Code				0.20mm		
		Barcodes	0.125mm			0.15mm		
	Scanning reference position		—			90mm		
	Marker		—			Area guide marker		
	Scan Confirmation		3 Color LED (Red/Blue/Green), speaker, vibration					
Keypad	No. of Keys		25 keys (including power key) + 2 trigger keys					
Communications	Optical I/F	Communication System	Infrared (IrDA Ver. 1.3 [Lower Power] physical layer compliant)					
		Communication Speed	~115.2kbps, 460.8kbps, 4Mbps[※4]					
		Transmission Distance	Approx. 0.15m max.					
	Wireless I/F	Compatible Standards	—	IEEE802.11b/g	—	—	IEEE802.11b/g	—
		Transmission Distance[※5]	—	Indoors: Approx. 75m, Outdoors: Approx. 200m	—	—	Indoors: Approx. 75m, Outdoors: Approx. 200m	—
		Access System	—	Infrastructure mode, ad-hoc mode	—	—	Infrastructure mode, ad-hoc mode	—
		Security	—	WEP40,128, WPA-PSK(TKIP), WPA2-PSK(AES), WPA-1x(TKIP/EAP-TLS,PEAP), WPA2-1x(AES/EAP-TLS,PEAP), 802.1x(EAP-TLS,PEAP)	—	—	WEP40,128, WPA-PS(TKIP), WPA2-PSK(AES), WPA-1x(TKIP/EAP-TLS,PEAP), WPA2-1x(AES/EAP-TLS,PEAP), 802.1x(EAP-TLS,PEAP)	—
	Bluetooth		—	—	Bluetooth Ver. 1.2 based Class 2	—	—	Bluetooth Ver. 1.2 based Class 2
Power Supply	Main Battery		Lithium-ion battery					
	Hours of operation[※6]		Approx. 33 hours[※7]			Approx. 24 hours[※7]		
			—	Approx. 25 hours[※8]	Approx. 22 hours[※8]	—	Approx. 18 hours[※8]	Approx. 19 hours[※8]
Auxiliary Functions			Clock, beeper, vibration, low-battery indication, remote wake-up function					
Environmental Requirements	Operating Temperature[※10]		−20℃~50℃					
	Protection Rating		IP54					
	Drop Resistance[※11]		More than 1,000 times from 0.2m height/10 times on each 6 sides (total 60 times) from 1.2m height above concrete floor					
Weight (incl. battery)			Approx. 220g			Approx. 230g		

※1: User file area includes font file area (approx. 400kb). ※2: The LCD panel is manufactured using high-precision technologies. While the effective pixel count is more than 99.99%, please be aware that there may be up to 0.01% of dead or stuck-on pixels. ※3: The standard font, small font, 30 dot font, and 40 font may be set aside from the 16 bit font and 24 bit font. ※4: When using the communication unit for the BHT-800 series, the maximum value of the RS-232C is 115.2kbps, USB type 460.8kpbs, and Ethernet type 4Mbps. ※5: Transmission distances are theoretical values and may vary according to actual usage environment conditions. ※6: The hours of operation are a reference value based on operation at room temperature and may vary according to actual usage environment conditions. ※7: In the case of 1 scan per 5 seconds, at backlight level 1. ※8: In the case of scan: Wireless communication: Screen rewriting: Standby=1:1:1:20, at backlight level 1. Wireless ON only during communication and OFF at other times. ※9: 1 cycle 30 seconds=Scan (1 second), Bluetooth transmission (Transfer of 1KB/always connec+C81ted), Screen writing (1 second), Standby. Backlight level 1. ※10: 0~40℃ when recharging. ※11: Test value at room temperature, not guaranteed.

Scan Distance and Angle

BHT-800B
Scan Distance (mm)

BHT-825Q
Unit (mm)   Scan reference location (90mm)
QR code cell pitch
Barcode module measurements and scan range

Please refer to the website for products and details.
http://www.denso-wave.com/en/adcd/

●Design and specifications may change without notice for product improvement. ●Information in this catalog is valid as of March 2012.

Dimensions

Unit: mm (all measurements are for reference.)

BHT-800B   BHT-800Q
67   53   55
182
49   28   28

Accessories

- Hand strap
- Lithium-ion battery (BT-20LB)
- Operation guide
- User manual HP

Software

●Development Tool
・BHT-BASIC4.0 Transfer Utility
・BHT-BASIC4.0 Transfer Utility DLL Pack
・BHT-BASIC4.0 Program Converter HP

●BHT Software
・BHT Term Emulator (Software to use BHT such as AS/400 as a terminal of the host computer)
・BHT Browser (HTML browser)

●Setting Software   ●Operation Support Software
・BHT Setting HP   ・BHT Manager

HP Software with this mark can be downloaded from the company's website (Qbdirect) free of charge.

Accessories (sold separately)

●Communication Units
・CU-801 (RS-232C + battery charger for main unit)
・CU-811 (Ethernet + battery charger for main unit)
・CU-821 (USB + battery charger for main unit)
●Battery Charger
・CH-201A (Separate charger for lithium-ion battery)
・CH-851 (Main unit charger)
・CH-704 (Multi (4) battery charger)
●Battery
・BT-20LB (Lithium-ion battery)
●Case, etc.
・SCBHT-800B (soft case for BHT-800B)
・SCBHT-800Q (soft case for BHT-800Q)
・WHBHT-7000/7500 (waist case)

DENSO

HANDY TERMINAL
BHT-800
SERIES

Barcode Model
BHT-805B / BHT-805BW / BHT-805BB

2D Code Model
BHT-825Q / BHT-825QW / BHT-825QB

BHT-825Q   BHT-805B

Stress-less quick scanning

Comfortable grip, even over a sustained period of operation

Full support from software design to introduction, and operation

Denso Wave Co., Ltd

Scanning Performance

Unique scan technology for excellent performance. Easy use and smooth scanning even for those new to the operation.

Applicable Model
2D Code Model

Fastest label scanning in the industry with newly developed 2D engine. **NEW** ※In the case of BHT-825Q

- Multiple codes can be quickly scanned, reducing work time.
- Speed is increased by approximately 20% when scanning QR codes, and 70% in the compatibility mode of both QR codes and barcodes. (Compared to BHT-805Q.)

Applicable Model
Barcode Model

Wide scan visibility

JAN code
ITF code

- BHT-800B can scan barcodes with different widths such as ITF, JAN at the same scan distance.
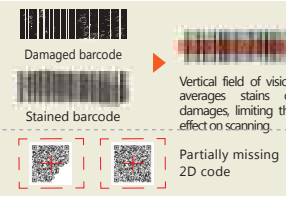 High speed scanning and decoding improves scanning speed by 85%※
  ※Compared to other product of company.

Touch Scan

- Easily scans order books or small shelf codes which are difficult to target.

Applicable Model
Barcode Model
2D Code Model

Degraded code scanning possible※

Damaged barcode
Stained barcode
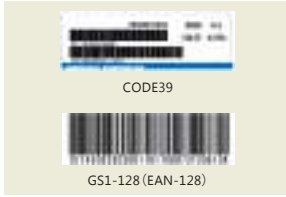Vertical field of vision averages stains or damages, limiting the effect on scanning.
Partially missing 2D code

- Easily reads rubbed, peeled, or poorly printed codes.
  ※May not be able to read codes depending on deterioration state.

Reads wide barcodes.

CODE39
GS1-128 (EAN-128)

- Barcode model and the 2-dimensional model GS1-128 (EAN-128) can also scan 'wide barcodes' including CODE39 EIAJ labels used for medical supply labeling.
  ※BHT-805B Series:
  Maximum approx. 195mm (equivalent to 50 characters of CODE39)
  ※BHT-805Q Series:
  Maximum approx. 140mm (equivalent to 36 characters of CODE39)
  ※BHT-825Q Series:
  Maximum approx. 100mm (equivalent to 50 characters of CODE39)

Design

Ergonomically designed for excellent grip in various operation environments.

Designed to have a stable grip and for ease of operation.

800B 800Q
Side Reverse Front

1. Curved design to easily line up scanning target.
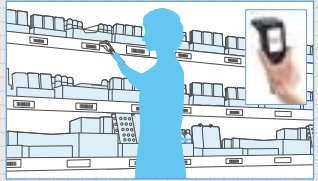2. Concave shape to prevent fingers from shaking while holding the unit.
3. Non-slip grip on both sides to prevent slipping.
4. Reverse side shaped comfortably for a stable grip.
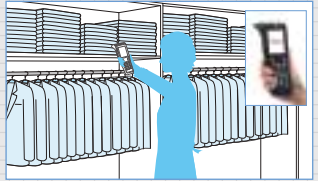5. Easy-to-read and highly durable keys.

The BHT-800 series is strong at all locations.

Inspection in the store.
Excellent grip design reduces fatigue even during repeated inspection scans.
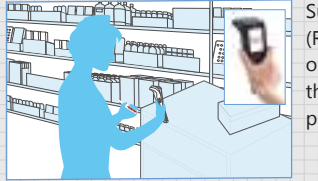
Ordering in the store.
Through the screen with easy visibility, increases efficiency when working while checking order information on the screen.

Checking inventory in the backyard (warehouse).
Reduces work time on inventory checking tasks where scanning and quantity input repeats with one device.
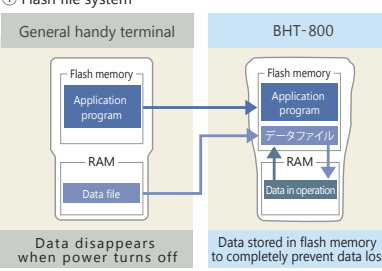
Picking medical products
Supports GS1 DataBar (RSS) scans, making it optimal for picking in the medical, medicine preparation fields.
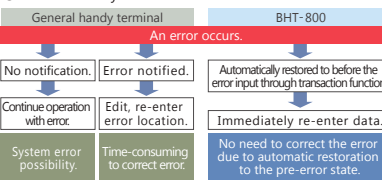

Durability and Environmental Resistance

Safe data storage + error avoidance function

① Flash file system

General handy terminal
- Flash memory
  - Application program
- RAM
  - Data file
- Data disappears when power turns off

BHT-800
- Flash memory
  - Application program
  - データファイル
- RAM
  - Data in operation
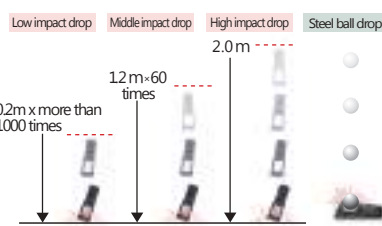- Data stored in flash memory to completely prevent data loss

- Inputted data is saved in the handy terminal's flash memory, preventing data loss even when the battery runs out of power.
  There is no need to be worried about data loss, even when the battery is low.

② Transaction System

General handy terminal — An error occurs.
- No notification. | Error notified.
- Continue operation with error | Edit, re-enter error location.
- System error possibility. | Time-consuming to correct error.

BHT-800
- Automatically restored to before the error input through transaction function.
- Immediately re-enter data.
- No need to correct the error due to automatic restoration to the pre-error state.

- The new 'transaction system' automatically restores the system to the pre-error state. It gives you peace of mind and makes use hassle-free, even when a file error occurs.
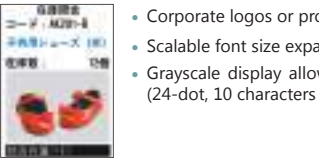
High drop resistance and environmental resistance

Low impact drop | Middle impact drop | High impact drop | Steel ball drop
2.0 m
1.2 m×60 times
0.2 m x more than 1000 times

- In addition to the repeated drop from the average operation height of 1.2m, tests include both repeated greater or lesser impact to consider all types of impact. Excellent durability ensures use with peace of mind.
- Through screen protection plate experiments, strength is more than twice of previous models (BHT-300).
- Achieves an IEC International standards protection rating of IP54 with high quality technology.
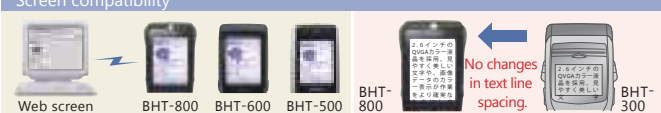
Screen Display

Large and easy to read QVGA color display

- Corporate logos or product images can also be displayed.
- Scalable font size expands freedom in screen design.
- Grayscale display allows clear display of complicated characters. (24-dot, 10 characters x 13 lines display)

Smooth transition between models

Screen compatibility

Web screen | BHT-800 | BHT-600 | BHT-500
No changes in text line spacing.
BHT-800 | BHT-300

- Display previous QVGA screen model and web screen as is.
- Offers compatibility mode to transfer between BHT-300 screen.

Function

Speaker/Vibration

- Vibration and sound alerts notifying end of task or error.
- Supports WAV files to designate sound of choice.

Communication

Wireless LAN & Bluetooth®

- Supports IEEE802.11b/g which realizes up to 54Mbps in transmission speed※1 and the latest wireless security technology such as WEB key and SSID through WPA/WPA2. Also supports Bluetooth※2
  ※1: Only available on BHT-805BW/QW, BHT-825QW
  ※2: Only available on BHT-805BB/QB, BHT-825QB

Software supporting application development to operation

■ Development

"BHT-BASIC4.0" which supports high quality application development.

- Full support of application program development, increasing compatibility between different models.
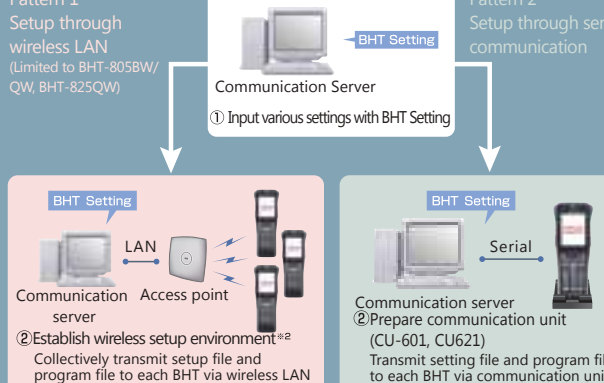
■ Introduction

"BHT Setting" which makes set up easy.※1

- Various settings and application installation is made simple to introduce these handy terminals.

● BHT Setting order

Pattern 1
Setup through wireless LAN
(Limited to BHT-805BW/QW, BHT-825QW)

Pattern 2
Setup through serial communication

BHT Setting
Communication Server
① Input various settings with BHT Setting

BHT Setting
Communication server | Access point
LAN
② Establish wireless setup environment※2
Collectively transmit setup file and program file to each BHT via wireless LAN

BHT Setting
Communication server
② Prepare communication unit (CU-601, CU621)
Serial
Transmit setting file and program file to each BHT via communication unit

※1 Downloadable at the company website QBdirect) free of charge.
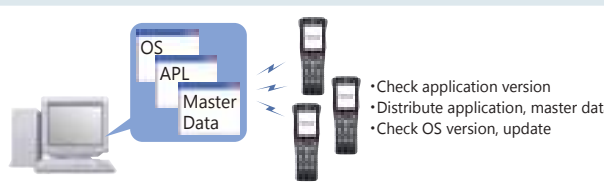※2 Requires access point with DHCP server functions available.
MOTOROLA APS131: Available
CISCO Systems AIR-AP1131AG: Not available

■ Operation

Reduces operation steps. "BHT Manager" support software.

- Reduces operational hassle by checking work situation and automatically updating the application or OS.

● BHT Manager usage image
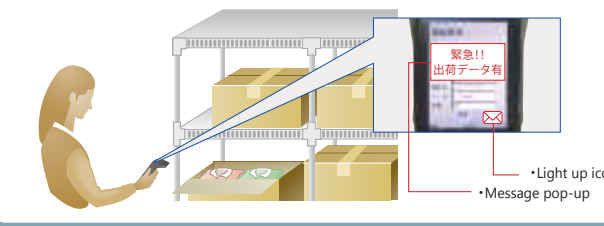
<BHT Maintenance>
OS
APL
Master Data
- Check application version
- Distribute application, master data
- Check OS version, update

No need for the user to develop a maintenance application.

<Distribute message to user>※Support planned.
緊急!!
出荷データ有
- Light up icon
- Message pop-up

Unlike orders made by voice over the phone or VoIP, the series of tasks can be checked after execution.

<Transmitting master data/collected data>
- Use each communication unit - Use wireless LAN