

BHT-1300 series specification

		2D code model	Barcode model
Type		BHT-1306QWB	BHT-1306BWB
OS			
CPU		BHT-OS 32-bit RISC microprocessor	
Memory		Flash ROM <sup>1</sup> 64 MB (45 MB for user area)	
Display		Number of Dots <sup>2</sup> QVGA (240x320 dots)	
Display device		Liquid crystal dot matrix display (color)	
Displayable characters <sup>3</sup>		16-dot font 15 (2-byte characters) × 20 rows, 30 (1-byte characters) × 20 rows	
Back light		24-dot font 10 (2-byte characters) × 13 rows, 20 (1-byte characters) × 13 rows	
Scanner		White LED	
Mode		Area sensor	Advanced scan plus (CCD)
Decode		2D code	QR code, micro QR code, SQRC, iQR, PDF417, micro PDF417, Maxi code, DataMatrix (ECC200), EAN.UCC Composite (GS1 DataBar Composite)
Barcode		EAN-13/-8 (JAN-13/-8), UPC-A/-E, UPC/EAN (Add-on embedded), Interleaved 2 of 5, CODABAR (NW-7), CODE39, CODE93, CODE128, GS1-128 (EAN-128), GS1 DataBar (RSS)	
Minimum resolution		2D code	Barcode
Reading reference position		100mm	50mm
Maker		Area guide maker	
Scan Confirmation		LED in three colors: Blue/red/green, speaker, vibration	
Key input section		Number of keys 22 keys (including power key) + Cross-hair cursor key + 2 trigger keys	
Communication		Optical I/F Communication mode Infrared ray (IrDA Ver. 1.2 [low power] physical signaling layer-compliant)	
Wireless LAN		Transmission speed Up to 115.2 kbps, 460.8 kbps	
Bluetooth		Communication distance Approximately 0.15 m MAX.	
Cable I/F		Suitable standard IEEE 802.11 b/g/n compliant	
Card slot		Frequency 2.4 GHz band	
Power		Communication distance <sup>4</sup> Approx. 75 m indoors, approx. 200 m outdoors	
Main battery		Transmission speed <sup>4</sup> IEEE802.11b:11/5.5/2/1Mbps, IEEE802.11g:54/48/36/24/18/12/9/6Mbps, IEEE802.11n:65/58.5/52/39/26/19.5/13/6.5Mbps	
Operating time <sup>5</sup>		Access method Infrastructure mode, ad-hoc mode	
Additional functionality		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)	
Environmental performance		Bluetooth Ver2.1+EDR based class 2	
Operating temperature		USB Ver2.0 (USB microB)	
Security level		microSDHC (up to 32GB)×1	
Drop resistance <sup>9</sup>		Lithium-ion battery or 3 AAA alkaline batteries (separately sold battery adapter required)	
Mass		95 hours (with standard battery)/ 55 hours (with thin battery) <sup>6</sup>	
		98 hours (with standard battery)/ 57 hours (with thin battery) <sup>6</sup>	
		28 hours (with standard battery)/ 15 hours (with thin battery) <sup>7</sup>	
		30 hours (with standard battery)/ 16 hours (with thin battery) <sup>7</sup>	
		Clock, speaker, vibrator, battery and voltage indicators, keypad backlight, remote wakeup	
		-20°C to 50°C*	
		IP54	
		10 times of dropping tests from 2.0/1.2 m height over a concrete floor with each of 6 sides of the enclosure facing down (60 times total)	
		Approx. 188 g (with thin battery mounted), approx. 206 g (with standard batteries mounted)	

<sup>1</sup> Memory (about 400 KB) for font file area included in the user area; <sup>2</sup> Although the effective number of picture elements is more than 99.99% thanks to high-precision technologies used to manufacture LCDs, allow the possibility of some elements, less than 0.01%, that are missing or permanently turned on; <sup>3</sup> In addition to 16- and 24-dot fonts, 30-dot font, 40-dot font, standard font and small font can be set up for use; <sup>4</sup> The listed figures for communication distance and speed are theoretically possible figures and may vary depending on the work environment where the unit is used; <sup>5</sup> The described operating time is a reference figure under regular temperatures and may vary depending on usage conditions; <sup>6</sup> With one reading pass over a 5 s period and backlight level 1; <sup>7</sup> When ratios of reading, wireless communication, rewriting of screen and holding durations are 1:1:1:20 under continued wireless operation and backlight level 1; <sup>8</sup> Zero to 40°C when batteries are being recharged; <sup>9</sup> Result obtained in a test under regular temperature is shown and not meant as a guarantee.

Option (sold separately)

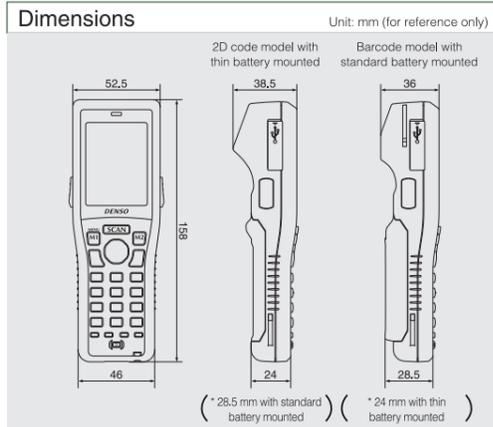
- Holder, which performs data communication with BHT communication unit and the up-level device
  - CU-1301 (RS-232C communications + recharging) • CU-1311 (Ethernet communications + recharging)
  - CU-1321 (USB communications + recharging)

Between BHT and host	Communication mode	CU-1301	CU-1311	CU-1321
		RS-232C	Ethernet (10BASE-T)	USB1.1 Full speed mode-compatible
Size(mm)		109(D)×95(W)×111(H)		
Working voltage		AC adapter	Supplied from USB port/AC adapter	

- Recharger
  - CH-1104 (4 serial battery rechargers)
  - CH-1354 (4 serial unit rechargers)
- Batteries/battery adapters
  - BT-130LA-C (thin battery + battery cover)\*
  - BT-130L-C (standard batteries + battery cover)
  - BT-130LA (thin battery only)\*
  - BT-20LB (standard batteries only)
  - BT-130D (adapter for drycell)
  - \* Available in a limited number of countries. Contact your dealer to inquire about availability.

- Cable
  - USB cable for PC-BHT
  - \* Using this cable, communications and recharging between a PC and a BHT unit are possible. However, use the above communication unit for daily communications and recharging.
- Soft case and others
  - SCBHT-1300 (soft case)
  - WHBHT-1300 (waist case)

**To use this product safely**  
 ● Before using this product, please read its User's Manual thoroughly for correct use.



Components

- Hand strap ● Guidelines for operation [HP](#) Instruction manual
- \* Battery and battery cover are not supplied with the product

Software

- Preinstalled software
  - Easy Pack Ad for BHT-1300 [HP](#)
- Development tools
  - BHT-BASIC4.0 Development Pack
    - Set items
      - BHT-BASIC4.0 Compiler • BHT-BASIC4.0 Remote Debugger
      - BHT-BASIC4.0 Transfer Utility
  - BHT-C software development kit [HP](#)
- HTML browser
  - BHT Browser
  - Online system emulator
  - BHT Term Emulator
- Setup software
  - BHT Setting [HP](#)
  - Operation support software
  - BHT Manager

[HP](#) Items with this mark are available from the company's homepage (QBDirect) free of charge

For more information, please visit our website  
<http://www.denso-wave.com/en/adcd/>

● Appearance and specifications are subject to change without prior notice. ● Description stated in this catalogue is as of May, 2013.

**NEW** →

**BHT-1300**  
SERIES



Ultimate usability realized in these models



3 years  
**3-year warranty for your peace of mind**  
 \* See inside pages for details.

Problems for both field workers and managers are solved!

# A Handy Terminal that makes everybody feel like using it is finally completed.



Ultra-light, compact body

- Length **158mm**
- Thickness **24mm**
- Weight **188g**

\* With thin battery mounted



\* Screen showing simulated images

## Why does this model make people feel like using it?

### A godsend for field operations!



Compact, but easy to use

- Each model's body is more than 15% thinner, lighter and smaller\*
  - Design was sought for functional beauty that also allows comfortable operation despite size constraints.
  - Dome-shaped keys are used, which can be operated easily by workers wearing work gloves.
- \* Compared to Denso Wave's BHT-800Q when a thin battery is mounted in respective 2D code models.



Capability to read codes from any angle of 360° makes for quick reading.\*

- Smooth 360° reading is realized using the latest algorithms.
  - Compared to barcode models, working time with the model can be reduced up to 30%.
- \* With only 2D code model



Distinctive displays even in bright sunlight

- A high-visibility LCD, High-Bright Display, is used.
- A wide viewing angle, and therefore, enhanced visibility from oblique angles is realized.



Long operation possible even when the unit is kept online

- Proprietary power-saving design allowing a 28-hour\* consecutive operation, the longest in its class.
  - Compliant with the latest wireless security standards to prevent illegal access
- \* When ratios of reading, wireless communication, rewriting of screen, and holding durations are 1:1:1:20 in continuous wireless operation; when a standard battery is mounted in 2D code models.



### Equipment that can be managed with peace of mind!



Solid and robust to protect both hardware and data

- Built-in toughness that endures droppings from 2 m height and operates in minus 20° to 50°C temperature range.
  - With a microSDHC inserted, stored data can be backed up.
  - Battery start-up\* is supported for emergency situations.
- \* A battery adapter sold separately is required.



Comprehensive support system available anywhere in the world.

- The model can be used in more than 40 countries worldwide.
- Supports displays in Japanese, English, Chinese, Korean and Thai.

Certification expected from the following countries:

27 states in the EU, USA, Canada, Australia, New Zealand, China, Taiwan, Hong Kong, South Korea, Singapore, Thailand, Malaysia, India, Indonesia, Philippines, Vietnam, Russia, Brazil



3-year warranty allows customer's long use with peace of mind.

- Customers who register on Denso Wave's website are offered a 3-year warranty.
- \* 1-year warranty for consumables as defined by Denso Wave (vibrator, keypad, etc.).

Warranty period is generally 1 year With BHT-1300,

warranty period is 3 years.

## Why are Denso Wave's products chosen over others?

### Rich experience

Pioneering company, established in 1978, in the automatic recognition field whose products boast the No. 1 spot for the number of units in use.

### Reliable, integrated production system

Denso Wave is engaged in every aspect of a product, its development, production, marketing and maintenance.

### Long-term support

Supplies for models are available for more than 5 years after launch. Even after sales end, 5-year support is guaranteed.

### Superior engineering prowess

Denso Wave is the company that developed QR Code, used all over the world.



### What makes workers in distribution field operations feel like using the model?

- It can be held comfortably even by women, and its aesthetics enable it to fit in anywhere with style.
- Thanks to its 360° reading capability, inventory time can be drastically cut.



### What makes workers in logistics and production field operations feel like using the model?

- Round-the-clock use of the model, which is compliant with IEEE 802.11 b/g/n, is possible while it is operated online.
- The model's robust durability ensures accurate use in tough work environments with peace of mind.