Supports any system.

Applications for BHT-1300 series

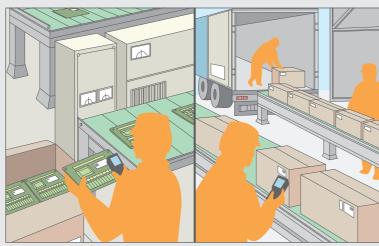
In retail/wholesale fields

- 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.



In distribution/ manufacturing fields

- 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.



DENSO WAVE Quality

Why are DENSO WAVE's products chosen over others?



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



ven after sales end, 5-year support is guaranteed.



ENSO WAVE is the company that developed

DENSO

BHT-1300

BHT-1300 series specification

			2D code model			Barcode model						
Туре			BHT- 1361Q-CE	BHT-1361QWB-CE	BHT- 1306Q	BHT-1306QWB	BHT- 1361B- CE	BHT-1361BWB-CE	BHT- 1306B	BHT-1306BWB		
os			Windo	ws Embedded Compact 7		BHT-OS	Windo	ows Embedded Compact 7		BHT-OS		
CPU			ARM Cortex-A8 800 MHz			32-bit RISC microprocessor		RM Cortex-A8 800 MHz		32-bit RISC microprocessor		
Memory	Flash ROM	l ^{*1}	2.0 G	BB (1.2 GB for user area)		64 MB (45 MB for user area)	2.0 GB (1.2 GB for user area)			64 MB (45 MB for user area)		
Display	Number of	Dots ^{*2}				2.4 inch QVGA	(240×320 dots)					
	Display device		Liquid crystal dot matrix display (color)									
		Displayable characters 3 24-dot font		Can be set as required in the application.		15 (2-byte characters) × 20 rows, 30 (1-byte characters) × 20 rows 10 (2-byte characters) × 13 rows, 20 (1-byte characters) × 13 rows		Can be set as required in the application.		15 (2-byte characters) × 20 rows, 30 (1-byte characters) × 20 rows 10 (2-byte characters) × 13 rows, 20 (1-byte characters) × 13 rows		
	Back light						e LED					
Scanner	-				Area sens			Advano	ced scan plu	us (CCD)		
Coamo	Decode 2D code		QR code, micro QR code, SQRC iQR, PDF417, micro PDF417, Maxi code, DataMatrix (ECC200), GS1 DataBar Composite (EAN.UCC Composite)									
		Barcode	EAN-13/-8 (JAN-13/-8), UPC-A/-E, UPC/EAN (Add-on embedded					, Interleaved 2 of 5 (ITF), Standard 2 of 5 (STF), CODABAR (NW-7), 1-128 (EAN-128), GS1 DataBar(RSS)				
	Minimum	2D code	0.167 mm –									
	resolution	Barcode		0.125 mm								
	Reading ref	erence position		100 mm			50 mm					
	Maker		Area guide maker			-						
	Scan Confirmation		LED in two colors: Blue/red, speaker, vibrator		LED in three colors: Blue/red/green, speaker, vibrator		LED in two colors: Blue/red, speaker, vibrator		LED in three colors: Blue/red/green, speaker, vibrator			
Key input section	Number of	keys	21 keys (including power key) + cross cursor key + 3 trigger keys ⁻⁴									
Communication	Optical I/F	Communication mode	-		Infrared ray (IrDA Ver. 1.2[low power]physical signaling layer-compliant)		-		Infrared ray (IrDA Ver. 1.2[low power]physical signaling layer-compliant)			
		Transmission speed	i —		Up to 115.2 kbps, 460.8 kbps		-		Up to 115.2 kbps, 460.8 kbps			
		Communication distance	-		Approximately 0.15 m MAX.		-		Approximately 0.15 m MAX.			
	Wireless	Suitable standard	-	IEEE.802.11b/g/n compliant	-	IEEE.802.11b/g/n compliant	-	IEEE.802.11b/g/n compliant	-	IEEE.802.11b/g/n compliant		
	LAN	Frequency	-	2.4 GHz band	-	2.4 GHz band	-	2.4 GHz band	-	2.4 GHz band		
		Communication distance ¹⁵	-	Approx. 75 m indoors, approx. 200 m outdoors	-	Approx. 75 m indoors, approx. 200 m outdoors	-	Approx. 75 m indoors, approx. 200 m outdoors	-	Approx. 75 m indoors, approx. 200 m outdoors		
		Transmission speed ^{*5}	-	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	-	IEEE802.11b:11/5.5/2/1 Mbp, IEEE802.11g:54/48/36/24/18/12/9/6Mbps, IEEE802.11n:65/58.5/52/ 39/26/19.5/13/6.5Mbps	-	IEEE802.11b:11/5.5/2/1Mbps, IEEE802.11 g:54/48/36/24/18/12/9/6Mbps, IEEE802.11n:65/58.5/52/ 39/26/19.5/13/6.5Mbps	-	IEEE802.11b:11/5.5/2/1Mbps, IEEE802.11 g:54/48/36/24/18/12/9/6Mbps, IEEE802.11n:65/58.5/52/39/26/19.5/13/6.5Mbps		
		Access method	-	Infrastructure mode	-	Infrastructure mode, ad-hoc mode	-	Infrastructure mode	-	Infrastructure mode, ad-hoc mode		
		Security	-	WEP40, 128,WPA-PSK(TKIP,AES), WPA2-PSK(TKIP,AES), WPA-1x(TKIP,AES/EAP-TLS, PEAP,LEAP,EAP-FAST), WPA-2x(TKIP,AES/EAP-TLS, PEAP,LEAP,EAP-FAST), 802 1x(WEP)EAP-TLS, PEAP,LEAP,EAP-FAST)	-	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-PSK(TKIP, AES), WPA2-PSK(TKIP, AES), WPA1-X(TKIP, AES/EAP-TLS, PEAP, LEAPEAP-FAST), WPA2-X(TKIP, AES/EAP-TLS, PEAP, LEAPEAP-TLS, 802.1x(WEP/EAP-TLS, PEAP, LEAPEAP-FAST)	-	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)		
	Bluetooth		-	Bluetooth Ver. 2.1 + EDR based class 2	-	Bluetooth Ver. 2.1 + EDR based class 2	-	Bluetooth Ver. 2.1 + EDR based class 2	-	Bluetooth Ver. 2.1 + EDR based class 2		
	Cable I/F			-		USB Ver. 2.0 (USB microB)		-		USB Ver. 2.0 (USB microB)		
Card slot						MicroSD or MicroSDHC (up to	o 32 GB)×1	(FAT32 compliant)				
Additional	dditional functionality		Clock, speaker, vibrator, battery and voltage voltage indicators, keypad backlight indicators, keypad backlight, remote wakeup									
Environmental	Operating t	emperature										
performance	Security level		IP54									
	Drop resistance ⁷		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)									
Mass	· ·		Approx. 193 g (with thin battery mouted), approx. 211 g (with standard battery mounted) approx. 206 g (with standard battery mounted)		Approx. 193 g (with thin battery mouted), approx. 211 g (with standard battery mounted) Approx. 188 g (with thin battery mouted) approx. 206 g (with standard battery mounted)							

*1 Memory (about 400 KB) for font file area included in the user area; "2 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; "3 For BHT-OS model, the standard font, the small font, the 30-dot font and the 40-dot font can be set in addition to the 16-dot font and the 24-dot font; "4 Windows-OS model and BHT-OS model differ in key layout and allocation; "5 The listed figures for communication distance and speed are theoretically possible figures and may very depending on the work environment where the unit is used; "6 Zero to 40°C when batteries are being recharged; "7 Result obtained in a test

Power supply specifications

Туре		2D code model					Barcode model				
			BHT- 1361Q-CE	BHT-1361QWB-CE	BHT- 1306Q	BHT-1306QWB	BHT- 1361B-CE	BHT-1361BWB-CE	BHT- 1306B	BHT-1306BWB	
Power	Main ba	Main battery		Lithium-ion battery		Lithium-ion battery or 3 AAA alkaline batteries (separately sold battery adapter required)		Lithium-ion battery		Lithium-ion battery or 3 AAA alkaline batteries (separately sold battery adapter required)	
	E'8	Standard battery	29 hours ^{'9}	29 hours*9/27 hours*10*11	95 hours ⁹	95 hours 9/40 hours 10 11	30 hours 9	30 hours*9/28 hours*10 *11	98 hours ^{*9}	98 hours 9/42 hours 10 11	
		Thin battery	16 hours ^{'9}	16 hours*9/14 hours*10*11	55 hours ^{'9}	55 hours 9/21 hours 10 11	17 hours ⁹	17 hours*9/15 hours*10*11	57 hours ¹⁹	57 hours 9/23 hours 10 111	
		AAA alkaline batteries		-	45 hours ^{'9}	45 hours 9/17 hours 10 11		-	55 hours 9	55 hours 9/20 hours 10 111	

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



1243G-4 2015.1



HANDY TERMINAL

NEW> BHT-1300

2D code model



<Windows-OS model> <BHT-OS model> BHT-1306Q BHT-1306QWB

Barcode model



<Windows-OS model> <BHT-OS model> BHT-1361B-CE

BHT-1361BWB-CE BHT-1306BWB



OS can be selected according to use • Windows-OS / • BHT-OS

Amazing 360° reading capability*

*2D code model





OS can be selected from "Windows-OS" and "BHT-OS"!

NEW

* Screen showing simulated image

Windows-OS model released,

Windows-OS

DENSO

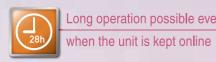
BHT-1300

DENSO

as user-friendly as ever

Universal handy terminal launched!

User friendly!



ong operation possible even

Proprietary power-saving design allowing a 28-hour* consecutive operation, the longest in its

of screen, and holding durations are 1:1:1:20 in continuous wireless operation; when a standard battery is



ntuitive operation with

· A convenient touch panel allows intuitive operation.





igh-performance hardware nables comfortable operation

· High-speed CPU and large-capacity memory enable fast and efficient processing.



but easy to use

· Each model's body is more than 15% thinner, lighter and 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 f 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%.





Distinctive displays even n bright sunlight

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





· Operation time longer than Windows-OS model. Unique power-saving design enables best-in-class long-time operation of 42 hours* even when continuously connected by wireless.

standby = 1:1:1:20 under continuous wireless WAN





Ready for use with simple usiness application software.

· A simple business application software (Easy Pack Ad) allowing collection of actual records for inventory and inspection plus 1:1/1:n collation is included as standard equipment

· No other devices are required for data transmission.



Easy-to-use

Even in the case of sudden loss of battery power, commercially-available dry-cell batteries can be used.

*A dry-cell adapter is separately required.

Equipment that can be managed with peace of mind!

Based on Windows Embedded



ompact 7

· Easy to use around the world, with a versatile OS.



note desktop/web browser duces development man-hours.

· Newly incorporated "remote desktop plug-in" and "web browser plug-in" enable thin client implementation with lower development costs.





Quick wireless cloning*

· Copies of another terminal can be made quickly Each terminal can be set up wirelessly without using a PC.





Solid and robust to protect ooth hardware and data

· Built-in toughness that endures droppings from 2 m height and operates in minus 20° to 50°C temperature range. · For Windows-OS model, data on terminals can be backed up with BHT Backup.

· For BHT-OS model, its transaction function automatically restores the immediately previous conditions in the case where the battery is disconnected and a file error occurs.



Comprehensive support system

vailable anywhere in the world.

· The model can be used in more than 40 countries Supports multi-language display.

For Windows-OS, fonts for more than 40 countries are supported. For BHT-OS model, Japanese, English, Chinese, Korean and Thai



3-year warranty allows customer's wa ong 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.

With BHT-1300, warranty period is 5 years.

27 countries in the EU, USA, Canada, Australia, New

Hong Kong, South Korea, Singapore, Thailand, Malaysia

arranty period is generally 1 year 🎅

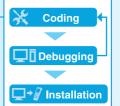
Zealand, China, Taiwan,

Vietnam, Russia, Brazil



quipped with BHT-BASIC.

· Equipped with a development tool to help develop all kinds of applications. Coding, debugging and installation can be efficiently controlled. Highly compatible, unique OS enables effective use of application assets.





Solid middleware suited

· Various software applications are prepared in cooperation with partner companies across Japan. We introduce software applications best suited to the industry and implementation for each customer



· Copies of another terminal can be made easily.

· BHT-OS model is as user-friendly as previous models, yet enables cloning

Compact model with ultimate usability



BHT-OS



<Windows-OS model>

Preinstalled software

Development tools

 Windows Embedded Compact 7-based Software Development Kit for BHT* (SDK) * This application software can be downloaded from our dedicated customer site only by

<Windows-OS model>

 Holder, which performs data communication with BHT communication unit and the up-level device

BHT-1300 SERIES

•CU-1301A (RS-232C communications + recharging)

CU-1311A (Ethernet communications + recharging)

•CU-1321 (USB communications + recharging)

•				_		
Between BHT and host	Communication mode	RS-232C	Ethernet (100BASE-T)	USB2.0 Full speed mode-compatible		
Charging unit Battery charge time		Approx. 3.5 hrs for st Approx. 2.5 hrs for		Approx. 10 hrs for standard battery/ Approx. 6 hrs for thin battery*1		
Size(mm)		109(D)×95(W)×111(H)				

Supplied from USB port/AC adapter*2 Working voltage

Soft case and others

Batteries/battery adapters

Recharger

CH-1104 Common (4 serial battery rechargers)
CH-1354 Common (4 serial unit rechargers)
CH-201A (Battery charger)
CH-201B (Battery charger)
Common

 CBBHT-US2000/C13-4A-CE The BHT-1300 can be charged EA-13B (touch scan Common attachment for barcode models)
 NSBHT-1300 (Neck strap) Common

 Hand strap with stylus Guidelines for operation * Battery and battery cover are not supplied with the product

Instruction manual <BHT-OS model>

Guidelines for operation

Instruction manual

* Battery and battery cover are not

Hand strap

<BHT-OS model>

Holder, which performs data communication with BHT communication unit and the un-level device

 CU-1311 (Ethernet communications + recharging) •CU-1321 (USB communications + recharging)



rging unit	Battery charge time	Approx. 3 hrs for standard battery/ Approx. 2 hrs for thin battery	Approx. 7 hrs for standard battery/ Approx. 4 hrs for thin battery*1				
(mm)		109(D)×95(W)×111	(H)				
king vo l tag	е	AC adapter ^{⋆2}	Supplied from USB port/AC adapter*2				
anges depending on the power supplying capacity of connected device: approx. 3 hrs for standard battery and approx. 2 hrs for thin battery when AC							

Soft case and others

Batteries/battery adapters

BI-130DA (fillin battery only)
BI-20LB (standard batteries d
B-130D (adapter for drycell)

* Available in a limited number of countrie

Recharger

(4 serial battery rechargers
• CH-1354 Gommon

Communication cable

