

BT-W SERIES GENERAL CATALOGUE

Global Model Edition



BT-W
100
SERIES



BT-W
80
SERIES



BT-W
70
SERIES

A common platform is used so that you can choose a handheld terminal according to your operating environment while using a single application.

Intelligence



BT-W
100
SERIES

Durability

BT-W
80
SERIES





Length	170 mm
Weight	257 g
Screen size	3.5 -inch

- **BT-W100G/GM**
- **BT-W155G/GM**



Length	173 mm
Weight	223 g
Screen size	2.7 -inch

- **BT-W80G/GM**
- **BT-W85G/GM**

Lightweight

BT-W
70
SERIES



Length	156 mm
Weight	130 g
Screen size	2.4 -inch

* BT-W70 (with BT-WB2 attached)



BT-W70G/GM



BT-W75G/GM



Various system configurations are possible according to each operating environment and development method.

For Web application users

Web applications

You can browse Web pages using the Internet Explorer®. Existing Web applications can be used on this handheld terminal.

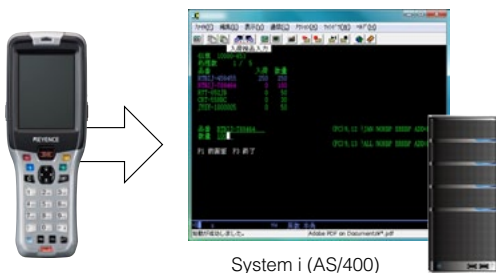


Web server

For System i (AS/400) users

Terminal emulator

You can view a System i (AS/400) screen on this handheld terminal in real time and apply input data directly to the screen.

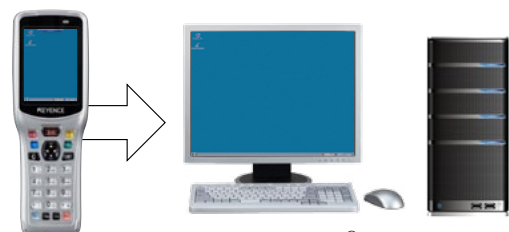


System i (AS/400)

For users who want to use their PC applications also on a handheld terminal

Terminal service

Can view PC applications via terminal service connection. Data in your PC can also be used, including documents, images, and Excel/PDF files.



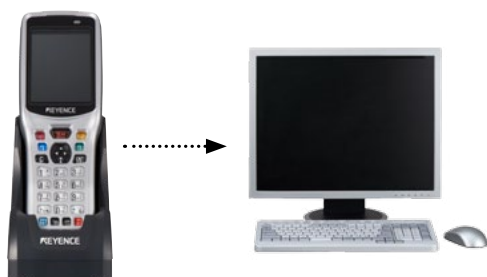
Windows® server

For users who want to simplify input operation



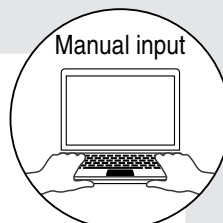
Embedded application (batch operation)

You can create an application using Visual Studio® 2008 Professional and send a text file via a communication unit.



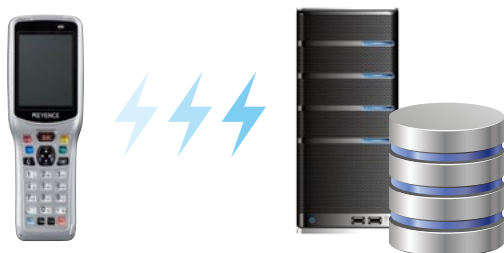
Direct input makes conventional manual data entry unnecessary!

For users who want to input data in real time



Embedded application (wireless operation)

You can create an application using Visual Studio® 2008 Professional and access your database through real-time communication.



Real-time communication makes manual Data input operation on your PC unnecessary!

INDEX

Reading Performance **P.6**
Supreme reading performance

Design/Size/Weight **P.7**
Form designed with optimum operability in mind

Touch Panel/LCD/Keys..... **P.8**
User interface with superb operability

Structure Durability/ Environmental Resistance **P.9**
KEYENCE's view of "durability"

Long-term Operation **P.10**
Battery systems that support long continuous usage and long life

System Reliability **P.11**
Reliable system for achieving stable operation

Compatibility **P.12**
High compatibility that allows you to select your choice of model

Other Convenient Functions **P.13**
Built-in easy-to-use functions

Connectivity/ System Configuration **P.14**
Various built-in interfaces to support a wide variety of solutions

Function INDEX **P.15**
Comprehensive built-in functions

Built-In Operation Management Software **P.16**
BT Management Tool

Sales Consulting **P.20**

Applications **P.21**

Specifications **P.22**

Peripheral Equipment/ Dimensions **P.23**



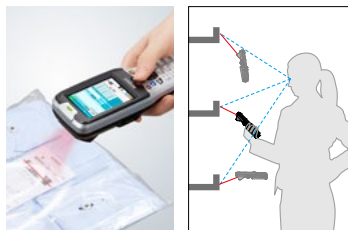
Supreme reading performance

BT-W100/W80/W70 SERIES



Sharp reading performance

These Series use a radiation angle of 30 degrees, which is ideal for scanning codes in front of you, such as store shelf labels. You can check the radiated position over the terminal while watching the screen.

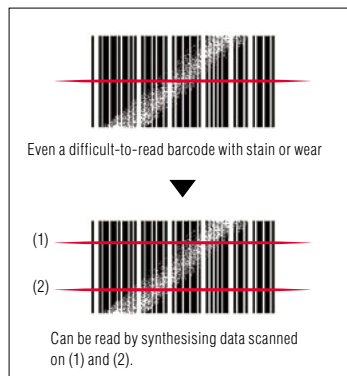


Supreme reading performance allows you to identify the radiated position intuitively.

BT-W100/W80/W70 SERIES

Barcode synthesising function

A newly equipped barcode synthesising function allows you to read even damaged barcodes.



BT-W155/W85/W75 SERIES



Resolves the difficulty of challenging codes and shake

The redesigned decoding engine greatly improves reading performance for challenging codes and shake resistance. Work takt time can be reduced by capturing codes more quickly.

Can read even challenging codes

Codes with poor printing



Thin printing



Bleeding



Worn printing



Primary noise

Heavily stained codes



Oil stain

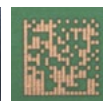


Oil stain

Codes printed on various materials



Black resin



PCB



Stainless steel

Resistant to shake as well



Much faster code "capture" reduces your work takt time significantly!



	Length	Weight	Screen size
BT-W100	170 mm	257 g	3.5 -inch
BT-W80	173 mm	223 g	2.7 -inch
BT-W70	156 mm	130 g	2.4 -inch

* BT-W70 (with BT-WB2 attached)

Ergonomic designed with optimum operability in mind

BT-W100/W80/W70 SERIES

Natural Ergonomic designed fits right in your hand

An integrated design of grip and rechargeable battery has resulted in a rounded, easy-to-hold form. This ultimate user-friendliness ensures comfort even over long period of operation.



BT-W100/W80/W70 SERIES

Utmost stability with optimum centre-of-gravity design

The terminal is designed not to tilt and fall forward when held with the index finger slightly forward of the centre of gravity. In this way, the terminal is maintained in optimum posture and balance.



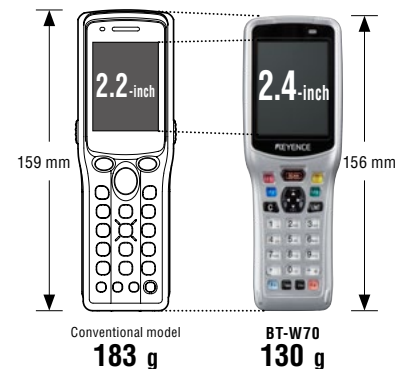
The design, that the centre of gravity naturally tilts in the direction of the grip, ensures excellent stability.

BT-W70 SERIES

30%
lighter

An ultralight body of 130 g with a built-in 2.4-inch LCD

KEYENCE's metal replacement design has succeeded in making components smaller and lighter. Even with a built-in 2.4-inch LCD, an ultralight body of 130 g has been achieved.



* BT-W70 (with BT-WB2 attached)

Interoperability



BT-W100/W80 SERIES

Built-in touch panel

A built-in touch panel ensures intuitive operation for everyone.



BT-W100/W80/W70 SERIES

Use of work gloves also considered

Key pitches and positions have been designed so that operators can press each key accurately even in a plant or warehouse. Smooth operation is ensured even when you wear work gloves.



BT-W100/W80/W70 SERIES

Superb operability with your thumb alone

Frequently used keys are collected at the centre while function keys are located near the screen. Rounded key tops also provide extremely comfortable pressing.



BT-W100/W80 SERIES

Built-in key backlight

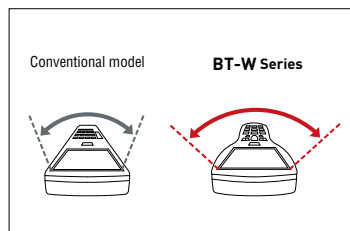
The built-in key backlight ensures superb visibility even in a dark place.



BT-W100/W80 SERIES

High intensity & contrast + wide viewing angle

Transmissive LCD panel and high reflection film are used to reduce power consumption by the backlight. Visibility is ensured no matter where the terminal is used.



BT-W100 SERIES

Automatic brightness control function

Based on the ambient brightness, the backlight is adjusted automatically to the optimum intensity, leading to improved visibility and battery efficiency.



KEYENCE's view of "durability"

Not susceptible even to unexpected accidents

Resistance to impacts of drops

+

Stable even under long-term operation

Resistance to accumulated damages

=

Users-expected

**"Absolute Durability"
= RELIABLE !**

BT-W100/W80/W70 SERIES

Structure resistant to both impacts of drops from a height and repeated damages

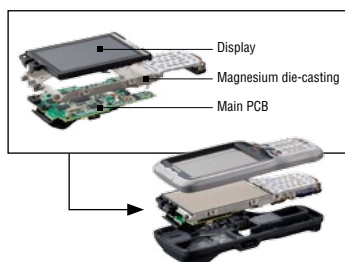
A construction that does not fix but intentionally floats key components and chassis reduces the effect of impacts on those parts effectively.

Drop resistance

BT-W100	1.5 m
BT-W80	3.0 m
BT-W70	1.5 m

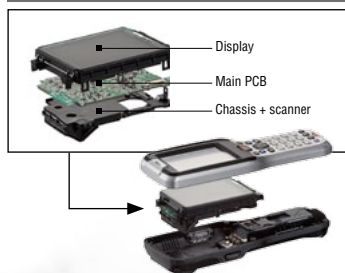
Chassis-floating structure

BT-W100 SERIES:



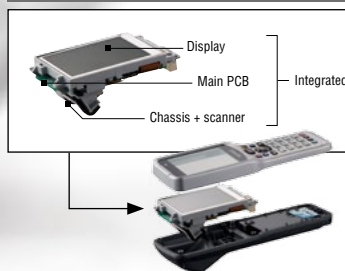
Block-floating structure

BT-W80 SERIES:



Hybrid-floating structure

BT-W70 SERIES:



BT-W100/W80/W70 SERIES

LCD also designed with durability in mind

The LCD screen is often subject to shock and under stress by "touch operation" even with daily usage. To ensure a long-term operation, KEYENCE has placed emphasis also on the durability of the LCD.

BT-W100 SERIES



- Protective film** Protects the surface of the touch panel (improves the sliding resistance by 2.5 times)
- Touch panel** Crack and electrode damage-resistant (5 times stronger than general glass)
- Optical gel** Absorbs shock (reduces shock to the LCD by 50%)

BT-W80 SERIES



- Protective film** Protects the surface of the touch panel (improves the sliding resistance by 2.5 times)
- Touch panel** Crack and electrode damage-resistant (12 times stronger than general glass)

BT-W70 SERIES



- Hard-coated panel** Durable and break-resistance panel made of polycarbonate

- Enclosure rating **IP64** BT-W80 **IP54** BT-W100/W70
- Operating temperature **-20°C to +50°C** BT-W80/W70 **-5°C to +50°C** BT-W100



Outperform rechargeable batteries support extended usage cycle and service life surpass conventional model



BT-W100/W80/W70 SERIES

Different batteries available according to models



BT-W100/W80
Uses a cylindrical battery with high capacitance density

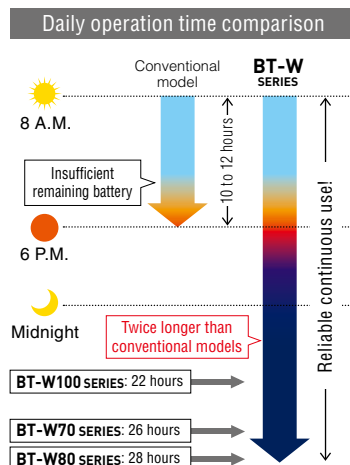


BT-W70
Can be used with two types of batteries, standard and large capacity

BT-W100/W80/W70 SERIES

Reliable endurance even under long time operation

KEYENCE's proprietary power-saving control system with supreme operating efficiency ensures comfortable operation all day without reduction in CPU processing speed.



* BT-W70 (with BT-WB3 attached)

BT-W100/W80/W70 SERIES

Extended battery life reduces running costs

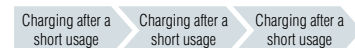
A built-in algorithm analyses the cause of battery degradation thoroughly and controls it effectively. Running costs can be reduced with greatly extended battery replacement cycle.

Operation examples that may lead to battery degradation

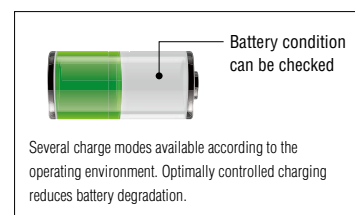
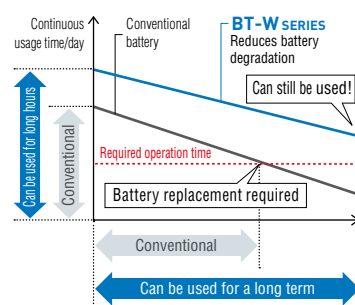
Kept in completely charged condition



Frequently repeated charging and discharging



Continuous usage time and lifetime



Steady reliable operation system



BT-W100/W80/W70 SERIES

Extended memory lifespan

A dedicated file system based on our unique design ensures a high reliability. This system can be used in the same way as the Windows® standard "FAT file system", increasing system reliability further.

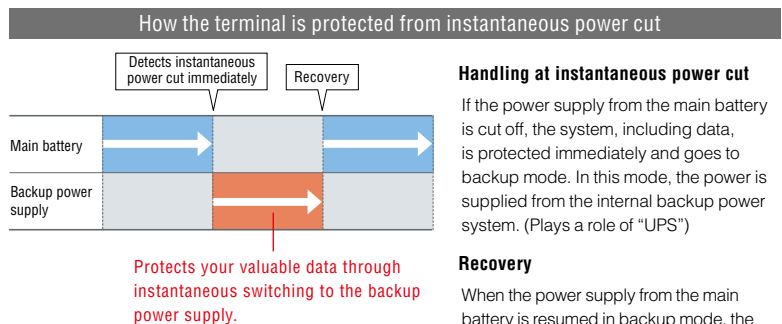
Item	BT-W Series-dedicated file system
Rewritable life	Long life thanks to wear leveling (access count leveling)
Immunity to instantaneous power cut	Protects the file system from instantaneous power cut that may occur at any time
Access and space efficiency	Efficient usage thanks to optimisation according to sizes of the ROM blocks and pages
Error handling	Corrects access errors specific to large-capacity memory

* Can be operated completely in the same way as the FAT file system from user applications.
* microSD cards and USB memories use the FAT file system.

BT-W100/W80/W70 SERIES

Data loss prevention - Protection & Recovery

These Series have a function that protects internal data when the power is instantaneously cut off. Even in case of sudden power cutoff, including when the battery comes off due to impact of drop, power supply is ensured from the internal backup power source. Your system and data are protected completely through immediate backup and recovery.



Easy system migration with high compatibility

Common platform

BT-W100/W80/W70 SERIES

Built-in high-speed CPU and high-performance OS

High speed, stress-free operation is ensured for drawing as well as data writing and reading.

BT-W100/W80/W70 SERIES

Built-in large-capacity flash memory (PureNAND)

A PureNAND memory is used as the internal storage to achieve both large capacity and quick access. Reliability is also ensured with KEYENCE's original NAND flash control.

Common user interface

BT-W100/W80/W70 SERIES

Consistent key arrangement

Keys are arranged consistently among different series. Similar user interfaces provide application affinity and unified operation procedures.

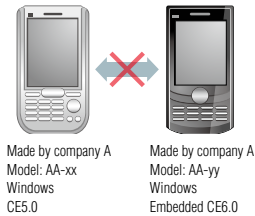
Common development environment/application

BT-W100/W80/W70 SERIES

Effective use of development assets

Situations with conventional Windows machines

When considering deployment of different models from the same manufacturer



- Different screen displays and sizes
- Different interfaces
- Different Internet Explorer versions
- Different drivers

Different applications need to be created for each model since different platforms (such as Windows OS versions) lead to different behaviours.

If the BT-W Series is used



Development environment:
Visual Studio 2008 Professional
Development tool: BT-WHD1
Operation management: BT-WHM1

A common platform is used so that software assets can be utilised effectively among different models. You can select the hardware best suited to your environment.



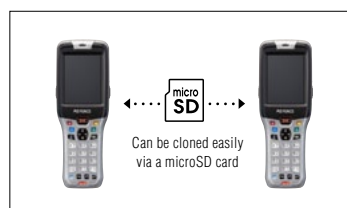


User friendly built-in functions

BT-W100/W80 SERIES

Built-in microSD (SDHC) slot

Up to 32 GB of data can be stored, including large product images and master files. Via a microSD card, the settings in your handheld terminal can be copied to another terminal, which is very useful when you replace terminals upon failure or deploy an additional one.



BT-W100/W80/W70 SERIES

Schedule function

Starts a specified application at a specified time. With this function, regular or nighttime operations can be performed without human intervention, including system maintenance and data backup.

BT-W100/W80/W70 SERIES

Direct key registration

Any key sequences can be assigned to function and other keys. This function allows you to display the calculator/software keyboard or capture a screen only with a single operation.

Built-in site survey function

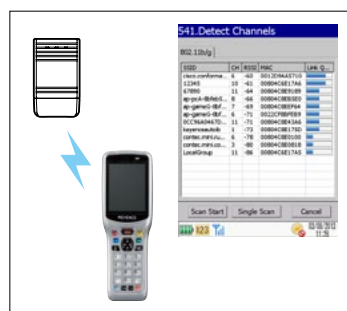
BT-W100/W80/W70 SERIES

Visualisation of radio waves!

You can test an access point before deployment.

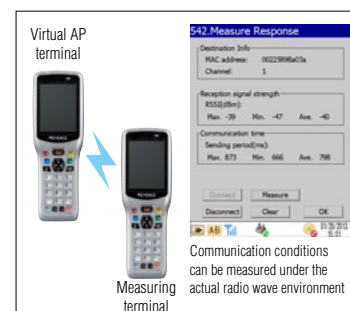
Channel detection function

Thanks to a built-in measurement tool, the radio wave environment can be checked with the BT-W Series alone. You do not have to buy a separate expensive radio wave metre any more.

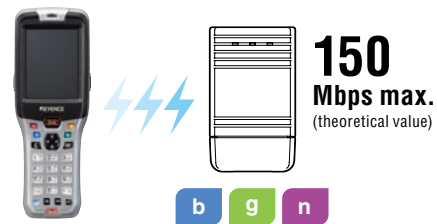


Virtual AP mode function

The BT-W Series can function as a virtual access point to reproduce a working radio wave environment. You do not need to use a computer or prepare an access point for testing. No additional wiring or installation is necessary either.



Various communication built-in interfaces to support a wide variety of solutions



BT-W100/W80/W70 SERIES

Wireless LAN standard IEEE802.11n-compliant

Due to compliance with IEEE802.11b/g/n, heavy content like product images can also be presented smoothly.

Wireless LAN standards			
Standard	Speed (theoretical value)	Frequency band	Feature
IEEE802.11n	150 Mbps	2.4 GHz	Long communication distance, resistance to obstacles
IEEE802.11g	54 Mbps	2.4 GHz	Resistance to obstacles Susceptible to microwave and Bluetooth interference
IEEE802.11b	11 Mbps	2.4 GHz	

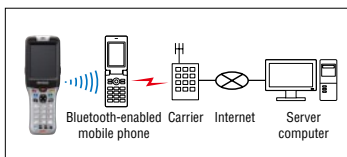
* Compliant with wireless LAN security standard WPA2 (IEEE802.11i).

BT-W100/W80/W70 SERIES

Standard Bluetooth® support

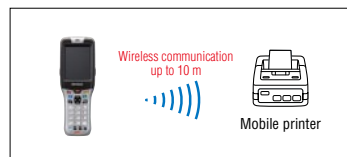
Bluetooth mobile phone

Communication with a remote server is possible via a Bluetooth-enabled mobile phone. Off-site data and results at each store can easily be collected into the central server.



Supports Bluetooth printers

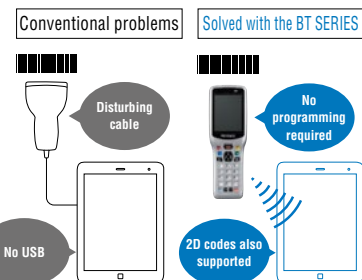
Using a Bluetooth-enabled printer, you can print ID tag labels and simplified POS system receipts easily on site.



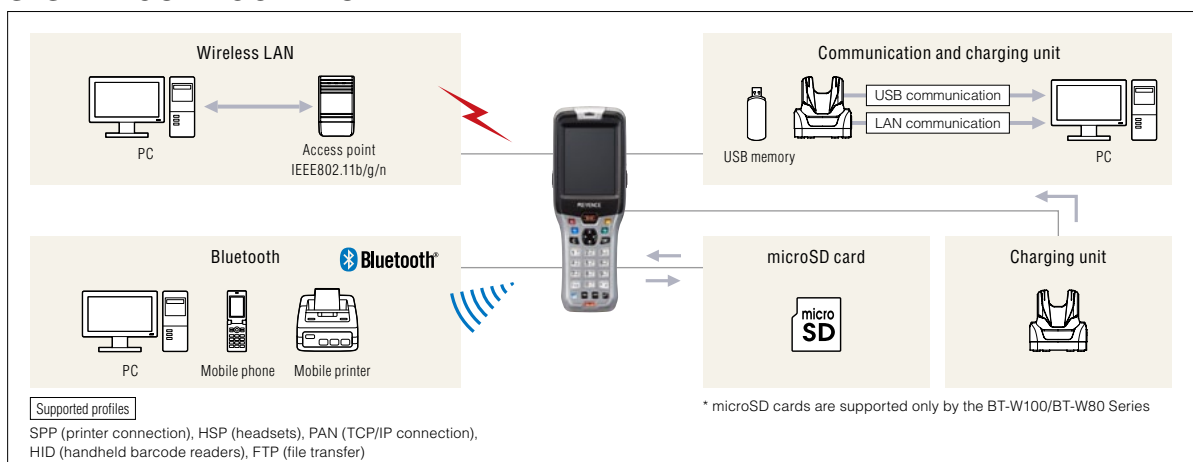
BT-W100/W80/W70 SERIES

Linkage with tablet/computer through Bluetooth communication (HID-compliant)
























Keyboard entry onto your tablet or computer is possible through Bluetooth connection. This Series can be used as a cordless barcode reader.



SYSTEM CONFIGURATION



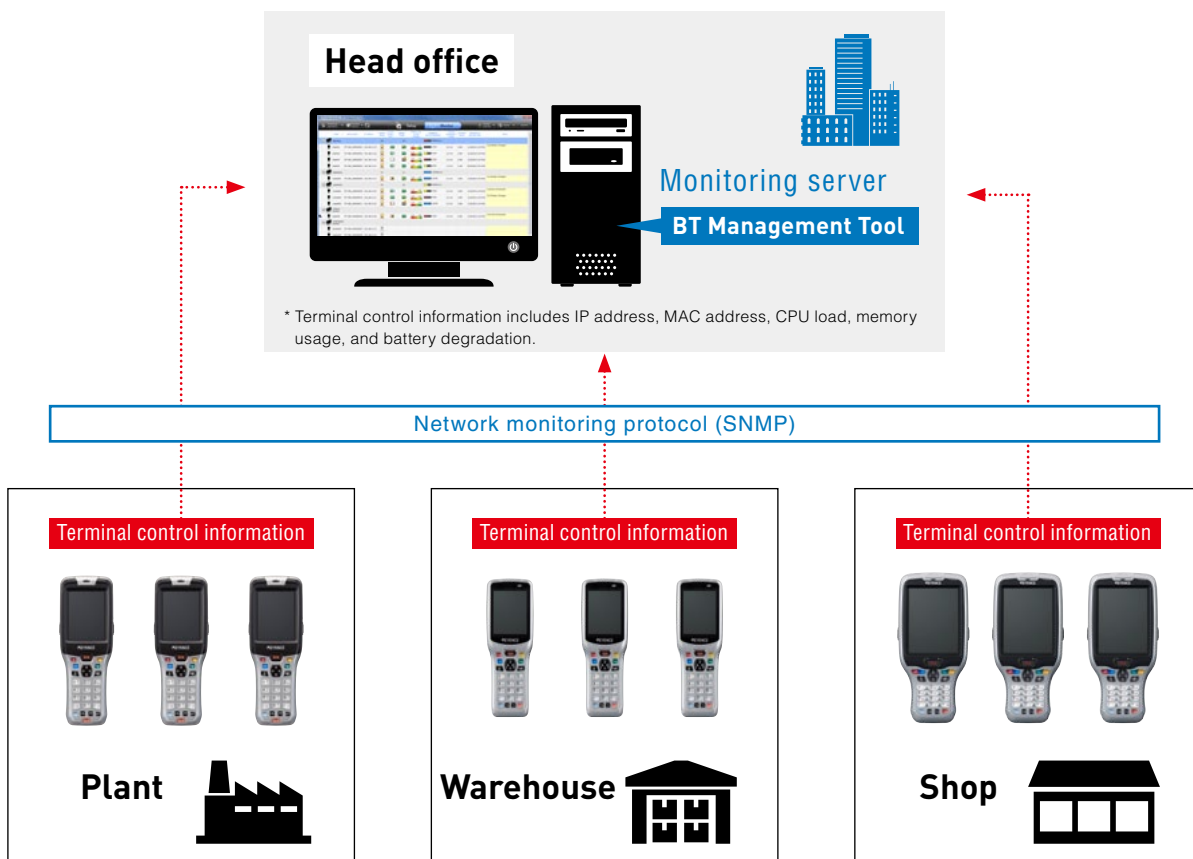
Comprehensive built-in functions

		Intelligence BT-W100 SERIES	Durability BT-W80 SERIES	Lightweight BT-W70 SERIES	
		3.5-inch LCD Handheld Terminal	2.7-inch LCD Handheld Terminal	2.4-inch LCD Handheld Terminal	
		Page	Function		
Reading Performance	Supported codes	P.6	<div> Barcode</div> <div> 2D code</div>		
Design/Size/Weight	LCD	P.7	<div>3.5-inch</div> <div>VGA</div>	<div>2.7-inch</div> <div>QVGA</div>	<div>2.4-inch</div> <div>QVGA</div>
	Size/weight		<div>257 g</div> <div> Centre-of-gravity design</div>	<div>223 g</div> <div> Centre-of-gravity design</div>	<div>130 g</div> <div> Centre-of-gravity design</div>
Touch Panel/ LCD/Keys	Outdoor visibility	P.8	<div> Transmissive panel</div>	<div> High reflection film</div>	
	Touch panel/ keys		<div> Key backlight</div> <div> Touch panel</div> <div>—</div>		
Structure Durability/ Environmental Resistance	Durable structure	P.9	<div>1.5 m</div>	<div>3.0 m</div>	<div>1.5 m</div>
	Enclosure rating/ operating temperature		<div>IP54</div> <div>-5 to 50 °C</div>	<div>IP64</div> <div>-20 to 50 °C</div>	<div>IP54</div> <div>-20 to 50 °C</div>
Long-term Operation	Energy saving	P.10	<div> Energy-saving design</div>	<div> Battery degradation control algorithm</div>	
	Battery/ duration		<div> Cylindrical</div> <div>22 hours</div>	<div> Cylindrical</div> <div>28 hours</div>	<div> Square</div> <div>26 hours Standard: 14 h, Large capacity: 26 h</div>
System Reliability	Data protection	P.11	<div> Dedicated file system</div>	<div> Data protection at instantaneous power cut</div>	
Compatibility	OS/CPU	P.12	<div>Windows®</div> <div>OS: Windows Embedded Compact 7</div>	<div> CPU: ARM Cortex-A8</div>	
	Development environment		<div>Visual Studio®</div> <div>Visual Studio 2008 Professional</div>		
Other function	Media interface	P.13	<div> microSD (SDHC)</div>	—	
Connectivity	Wireless LAN	P.14	<div> 11 bgn</div>	<div> Site survey function</div>	
	Bluetooth		<div> Mobile printer</div> <div> Mobile phone</div> <div> Tablet connection</div>		

New proposal

Remote access - Data collection via communication established

You can access handheld terminals on remote operation sites or collect their information remotely from the central management computer without actually going there.



**Remote access
reduces man-hours
and costs to visit each
remote site**

Remote control & file send/
receive function

You can access a terminal on a remote site simply through a one-touch operation! It is also possible to remotely operate the terminal or send/receive files to/from it.



Use scenarios

Response to contacts:
Checking how contacts have been responded

Failure check:
Checking failed terminals and recovery operation on remote sites

Operation instruction:
Instructing operation by operating terminal application on a remote site from a computer at the head office

Remote monitoring

Terminal monitor function

Terminal control information can be collected from each remote site to monitor operating conditions centrally. Their actual conditions can clearly be checked at the head office.

Connection conditions

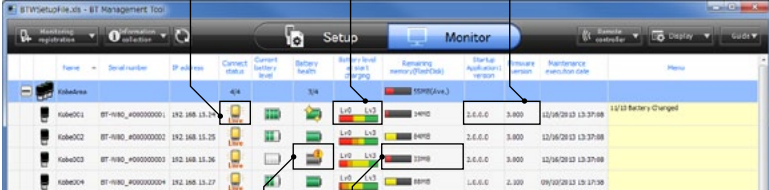
Shows terminal operating conditions and unused terminals

Battery level

Can check daily battery consumption

Software version

Shows the firmware/application version



Battery degradation

Indicates when to replace batteries beforehand

Remaining memory

Shows the memory usage on the terminal

Use scenarios

Terminal control:

Checking operating conditions of terminals at each remote site, managing locations of rented terminals, and understanding unused terminals

Terminal condition check:

Checking battery degradation, memory usage, and firmware version

Identification of operator location information:

Information of the access point currently being connected

Checking of logs on failures:

Information of operations immediately before failures have occurred

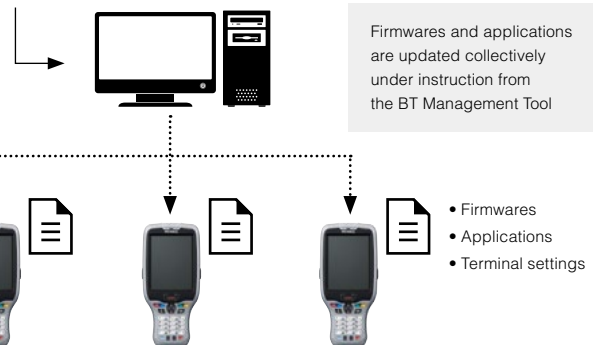
Remote management and upgrading

Collective version management and update function

Firmware and application versions and updates can be checked at a glance.



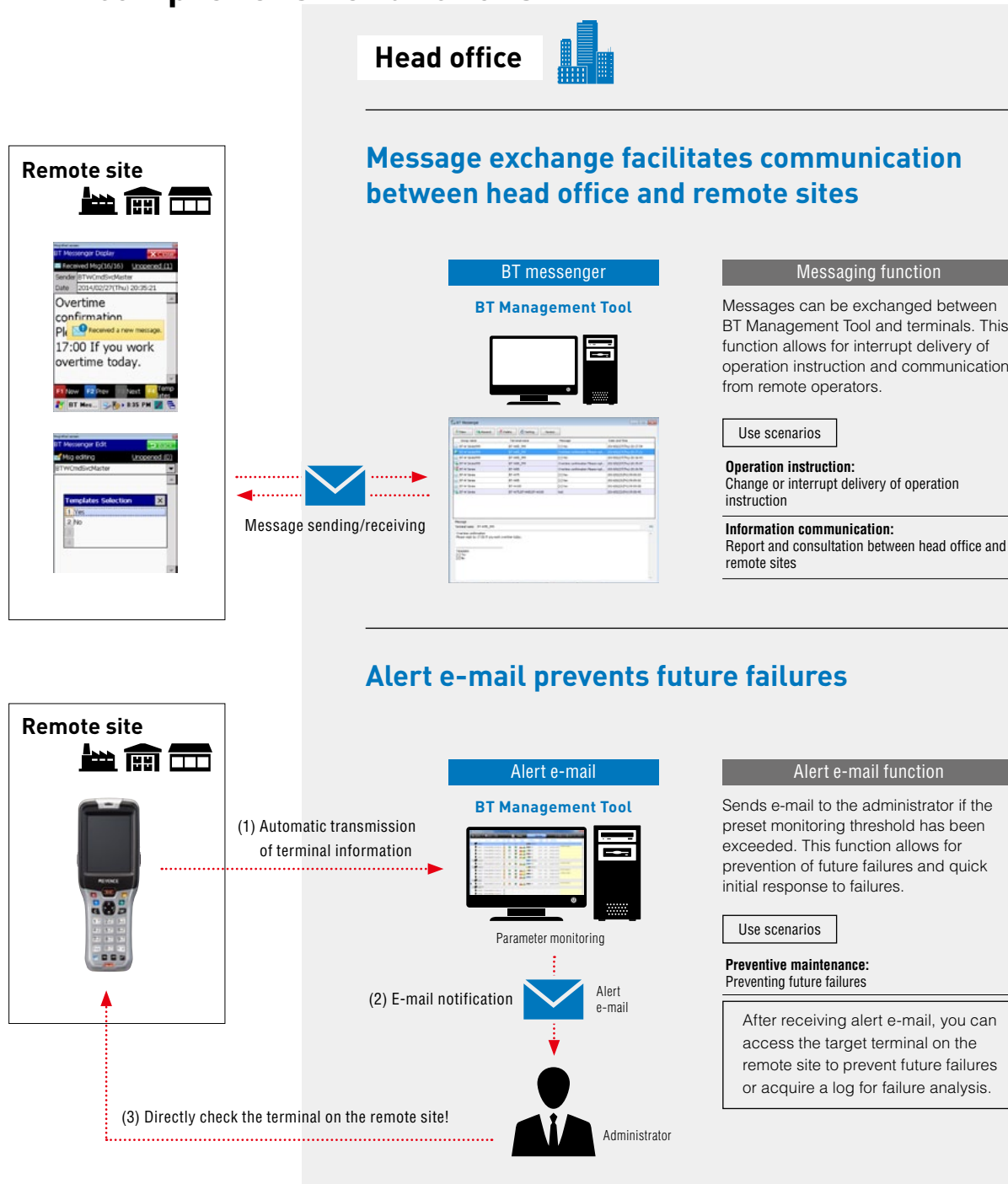
Name	Serial number	IP address	Connect status	Current battery level	Battery health	Battery level at start charging	Remaining memory (Flash/Avail.)	Startup Application version	Firmware version	Maintenance execution date	
KobeArea	BT-W80_#000000001	192.168.15.24	4/4	3/4		Lv5 Lv3	55MB(Avail.)	2.0.0.0	3.000	12/16/2013 13:37:08	11/10 Batts
Kobe001	BT-W80_#000000001	192.168.15.24	4/4	3/4		Lv5 Lv3	14MB	2.0.0.0	3.000	12/16/2013 13:37:08	
Kobe002	BT-W80_#000000002	192.168.15.25	4/4	3/4		Lv5 Lv3	24MB	2.0.0.0	3.000	12/16/2013 13:37:08	



Not only upgrading but also versions of firmwares, applications, and terminal settings can be centrally controlled. These information can be controlled easily even after handheld terminals are deployed on each remote site, which reduces maintenance man-hours drastically.



Deployment, operation, and maintenance all supported with comprehensive functions



Easy step-by-step deployment

Operation manual & application-specific wizard

Operation manual

Setup can be completed simply in accordance with the operation manual. Smooth deployment is ensured because information can be captured from the terminal.



Application-specific wizard

You can create a setup file according to your deployment pattern.

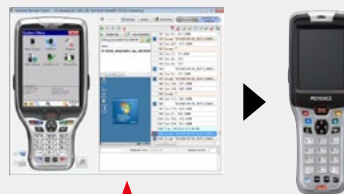


Reproduction of terminal operation helps accurate understanding of events

Operation log review function

You can review the operation history of a terminal from its operation log. Conditions can be checked or reproduced without relying on operator's memory.

Review of operation log on different terminal



Use scenarios

Upon wrong operation:

Checking the details of the operation and consistency with acquired data

Upon failure:

Checking how the terminal has been operated at the failure and analysing the cause through comparison with various logs

Remote site



Operation log

- Key/touch operation history
- Screen transitions during operation

Even in an emergency, log collection allows for immediate response

Log collection for failure analysis

In addition to basic communication and operation logs, you can also check operation history and screen captures. This leads to prompt determination of failure causes and significantly reduced response man hours.

Available logs



Terminal system log



Communication packet log



Application log



Cumulative log



Operation log



Operation screen capture

Use scenarios

Upon failure:

Identifying when and why the error has occurred, checking the operation log of the terminal, and checking how long and under what radio wave environment the terminal has been used

Remote site



One-touch kitting & no computer required

One-touch kitting function

(1) Create a setup information file



Setup information file



USB memory

(2) Insert your USB memory



Setup information file



(3) And just press the button



Maintenance button

Kitting completed!!

Dedicated to adding value for our customers

Direct Approach

Our technically trained sales engineers have extensive product knowledge along with application and industry experience. Customers can expect on-site support to quickly solve applications saving invaluable time.

KEYENCE Direct Sales System

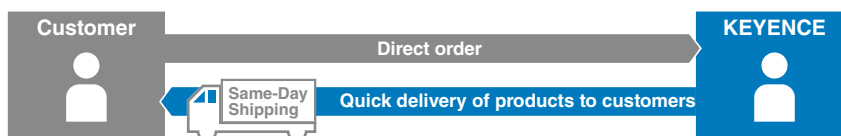


Conventional Sales Style



Fast Delivery

KEYENCE has established a fast delivery system to deliver required products whenever necessary. Products are shipped from warehouse centres in Japan, Singapore, Malaysia, India, Thailand, China, Taiwan, South Korea, U.S., Mexico, Canada, Brazil, the U.K., Germany, France, Belgium and Italy as well as many other locations worldwide.



Comprehensive Support

KEYENCE supports customers with extensive on-site manufacturing and automation knowledge. This includes comprehensive support from model selection to line operation with on-site operating instructions and precautions after product adoption.



Applicable to all sites, from distribution to logistics and to manufacturing



Receiving inspection/acceptance process



Order placement



Inventory management/clearance



Picking/shipping inspection



Location management



Gas cylinder delivery/container management



Process progress management/results



Malpractice check/vital sign entry



Prevention of wrong tip reel replacement

SPECIFICATIONS

Model		BT-W100G BT-W100GM		BT-W155G BT-W155GM		BT-W80G BT-W80GM		BT-W85G BT-W85GM		BT-W70G BT-W70GM		BT-W75G BT-W75GM			
Type		Laser type		Camera type		Laser type		Camera type		Laser type		Camera type			
Controller	CPU	ARM Cortex®-A8 (800 MHz)													
	OS	Microsoft® Windows® Embedded Compact 7													
Main memory	RAM	256 MB (disk area: 32 MB)													
	ROM	512 MB (disk area: 222 MB), flash-ROM													
Display	LCD	Display method	3.5-inch transmissive TFT colour LCD, VA method				2.7-inch transmissive TFT colour LCD				2.4-inch transmissive TFT colour LCD				
		Resolution (number of dots)	480 (W) x 640 (H) (VGA)				240 (W) x 320 (H) (QVGA)								
		Number of display colours	65,536												
		Font	MS P Gothic, MS UI Gothic, MS Gothic, Segoe UI, Courier New, Symbol, Tahoma, Times New Roman, Wingdings * Simsun and Nsimun need to be installed												
		Backlight	High-intensity white LED												
	Operation confirmation LED		3-colour LED (red, green, blue, yellow, cyan, magenta, white)												
Operations	Touch panel		Analogue resistive-film method (reinforced glass specifications)								—				
	Hard keys	Type	Set of arrow keys x 1 (4 directions), trigger keys x 3 (centre x 1, side x 2), function keys x 7 (F1 key, F2 key, F3 key, F4 key, Fn key, Tab key, character key), data input keys x 14 (0 to 9 keys, ENT key, clear key, minus key, symbol key), power key x 1				Set of arrow keys x 1 (4 directions), trigger keys x 3 (centre x 1, side x 2), function keys x 8 (F1 key, F2 key, F3 key, F4 key, Fn key, Tab key, character key, SFT key), data input keys x 14 (0 to 9 keys, ENT key, clear key, minus key, symbol key), power key x 1				Set of arrow keys x 1 (4 directions), trigger key x 1, function keys x 7 (F1 key, F2 key, F3 key, F4 key, Fn key, Tab key, character key), data input keys x 14 (0 to 9 keys, ENT key, clear key, minus key, symbol key), power key x 1				
		Backlight	LED (orange)								—				
Scanner	Optical characteristics	Reading light source	Visible semiconductor laser (655 nm), output: 1.0 mW, Class 2 laser product (IEC60825-1)		High-intensity red LED		Visible semiconductor laser (655 nm), output: 1.0 mW, Class 2 laser product (IEC60825-1)		High-intensity red LED		Visible semiconductor laser (655 nm), output: 1.0 mW, Class 2 laser product (IEC60825-1)		High-intensity red LED		
		Pointer light source	—		Visible semiconductor laser (655 nm), output: 390 µW, Class 1 laser product (IEC60825-1)		—		Visible semiconductor laser (655 nm), output: 390 µW, Class 1 laser product (IEC60825-1)		—		Visible semiconductor laser (655 nm), output: 390 µW, Class 1 laser product (IEC60825-1)		
		Scanning rate	100 scans/second		—		100 scans/second		—		100 scans/second		—		
		Minimum resolution	0.127 mm		2D code: 0.191 mm Barcode: 0.127 mm		0.127 mm		2D code: 0.191 mm Barcode: 0.127 mm		0.127 mm		2D code: 0.191 mm Barcode: 0.127 mm		
		Reading distance	35 to 270 mm (CODE39 narrow bar width: 0.508 mm) 40 to 190 mm (CODE39 narrow bar width: 0.254 mm) 25 to 205 mm (QR cell size: 0.508 mm) 75 to 140 mm (QR cell size: 0.254 mm) 62 to 542 mm (narrow bar width: 1.0 mm) 42 to 222 mm (narrow bar width: 0.25 mm)		(CODE39 narrow bar width: 0.508 mm) (CODE39 narrow bar width: 0.254 mm) (QR cell size: 0.508 mm) (QR cell size: 0.254 mm)		35 to 270 mm (CODE39 narrow bar width: 0.508 mm) 40 to 190 mm (CODE39 narrow bar width: 0.254 mm) 25 to 205 mm (QR cell size: 0.508 mm) 75 to 140 mm (QR cell size: 0.254 mm) 62 to 542 mm (narrow bar width: 1.0 mm) 42 to 222 mm (narrow bar width: 0.25 mm)		(CODE39 narrow bar width: 0.508 mm) (CODE39 narrow bar width: 0.254 mm) (QR cell size: 0.508 mm) (QR cell size: 0.254 mm)		35 to 270 mm (CODE39 narrow bar width: 0.508 mm) 40 to 190 mm (CODE39 narrow bar width: 0.254 mm) 25 to 205 mm (QR cell size: 0.508 mm) 75 to 140 mm (QR cell size: 0.254 mm) 62 to 542 mm (narrow bar width: 1.0 mm) 42 to 222 mm (narrow bar width: 0.25 mm)		(CODE39 narrow bar width: 0.508 mm) (CODE39 narrow bar width: 0.254 mm) (QR cell size: 0.508 mm) (QR cell size: 0.254 mm)		
		Reading label width/view range	—		81 x 51 mm (reading distance: 110 mm)		—		81 x 51 mm (reading distance: 110 mm)		—		81 x 51 mm (reading distance: 110 mm)		
		PCS	0.45 or more (Reflectance of white part: 70% or more)		—		0.45 or more (Reflectance of white part: 70% or more)		—		0.45 or more (Reflectance of white part: 70% or more)		—		
	Supported codes		JAN/EAN/UPC (add-on code support), CODE128, GS1-128, CODE39, NW-7(Codabar), CODE93, ITF, 2of5(Industrial 2of5), COOP 2of5, GS1 DataBar		JAN/EAN/UPC (add-on code support), CODE128, GS1-128, CODE39, NW-7(Codabar), CODE93, ITF, COOP 2of5, Micro QR, DataMatrix (ECC200), PDF417, GS1 DataBar, Composite		JAN/EAN/UPC (add-on code support), CODE128, GS1-128, CODE39, NW-7(Codabar), CODE93, ITF, 2of5(Industrial 2of5), COOP 2of5, GS1 DataBar		JAN/EAN/UPC (add-on code support), CODE128, GS1-128, CODE39, NW-7(Codabar), CODE93, ITF, COOP 2of5, 2of5(Industrial 2of5), QR, Micro QR, DataMatrix (ECC200), PDF417, GS1 DataBar, Composite		JAN/EAN/UPC (add-on code support), CODE128, GS1-128, CODE39, NW-7(Codabar), CODE93, ITF, COOP 2of5, 2of5(Industrial 2of5), QR, Micro QR, DataMatrix (ECC200), COOP 2of5, GS1 DataBar		JAN/EAN/UPC (add-on code support), CODE128, GS1-128, CODE39, NW-7(Codabar), CODE93, ITF, COOP 2of5, 2of5(Industrial 2of5), QR, Micro QR, DataMatrix (ECC200), PDF417, GS1 DataBar, Composite		
	Communication	Wireless LAN communication	Wireless standards	IEEE802.11b/g/n											
			Radio frequency	2.4 GHz (b, g, n: CHs 1 to 13)											
Communication distance			Indoor: 100 m (line-of-sight), Outdoor: 200 m (line-of-sight) (when 11/b/g/n is used)												
Bluetooth communication		Security methods	Security: WEP (64/128-bit)/WPA/WPA2 WPA encryption method: TKIP/AES Authorisation method: PSK/EAP-TLS/PEAP-MSCHAP-V2												
		Wireless standards	Bluetooth® V2.1 + EDR												
External recording media	Supported media	microSD or microSD (SDHC)										—			
	Supported capacity	32 GB max.										—			
Power supply	Main battery	Type	Dedicated lithium ion battery pack										Dedicated lithium ion battery pack (standard/large capacity)		
		Capacity	2450 mAh										1100 mAh/1880 mAh		
		Continuous usage time ^{*1}	Charge mode 1	Approx. 19 hours				Approx. 25 hours		Approx. 20 hours		Approx. 12 hours/approx. 23 hours ^{*1}			
			Charge mode 2	Approx. 22 hours				Approx. 28 hours		Approx. 25 hours		Approx. 14 hours/approx. 26 hours ^{*1}			
			Charge mode 3	Approx. 19 hours				Approx. 25 hours		Approx. 22 hours		Approx. 12 hours/approx. 23 hours ^{*1}			
		Charging time	Charge mode 1	Approx. 6.0 hours (normal temperature)										Approx. 4 hours/approx. 6.5 hours (normal temperature)	
			Charge mode 2	Approx. 4.5 hours (normal temperature)										Approx. 3 hours/approx. 4.5 hours (normal temperature)	
	Charge mode 3		Approx. 4.5 hours (normal temperature)										Approx. 3 hours/approx. 4.5 hours (normal temperature)		
Backup battery	Clock	Built-in lithium secondary battery: approx. 6 months ^{*2}				Built-in lithium secondary battery: approx. 1 month ^{*2}									
	RAM data	Electric double-layer capacitor: approx. 3 minutes ^{*2}				Electric double-layer capacitor: approx. 4 minutes ^{*2}									
Others	Buzzer	Scale: 16 levels, Volume: 3 levels													
	Vibration function	Available													
	Calendar/clock	Automatic calendar (year, month, day, hour, minute, second; up to year 2079), accurate within 80 seconds per month (normal temperature)													
Environmental resistance	Enclosure rating	IP54 (IEC60529)				IP64 (IEC60529)				IP54 (IEC60529)					
	Drop resistance ^{*3}	Onto concrete from a height of 1.5 m				Onto concrete from a height of 3.0 m		Onto concrete from a height of 2.5 m		Onto concrete from a height of 1.5 m					
	Ambient operating temperature	-5 to +50°C (no freezing) ^{*4}				-20 to +50°C (no freezing) ^{*4}				-5 to +50°C (when BT-WB2 is used), -20 to +50°C (when BT-WB3 is used) ^{*4}					
	Ambient operating humidity	20 to 85% RH (no condensation)													
	Ambient storage temperature	-20 to +60°C (no freezing)													
EMI	Ambient storage humidity	20 to 85% RH (no condensation)													
	VCCI Class A														
Dimensions			170 x 79 x 36.1 (31.3) mm (The value in parenthesis is the grip dimension.)		170 x 79 x 40.4 (31.3) mm (The value in parenthesis is the grip dimension.)		173 x 61.6 x 37.7 (30.3) mm (The value in parenthesis is the grip dimension.)		173 x 61.6 x 40.0 (30.3) mm (The value in parenthesis is the grip dimension.)		156 x 53 x 34.7 (21.3) mm With BT-WB2 attached		156 x 53 x 36.6 (21.3) mm With BT-WB2 attached		
Weight			Approx. 257 g (with rechargeable battery pack attached)		Approx. 262 g (with rechargeable battery pack attached)		Approx. 223 g (with rechargeable battery pack attached)		Approx. 227 g (with rechargeable battery pack attached)		Approx. 130 g (with BT-WB2 attached) Approx. 145 g (with BT-WB3 attached)		Approx. 135 g (with BT-WB2 attached) Approx. 150 g (with BT-WB3 attached)		
Accessories			Hand strap, stylus pen										Hand strap		


*1 This is the continuous usage time with the operation confirmation LED and vibration function turned off, with the buzzer turned on (with low volume), with the backlight turned on (with low luminance), at normal temperature, and when barcode reading is performed and round trip wireless communication is made once per 20 seconds.

*2 When the main battery is not attached or has no remaining charge.





*3 This is a test value. The value is not guaranteed.

*4 In a low-temperature environment, the lithium ion battery's continuous usage time decreases. Be sure to check operations before using the product.

PERIPHERAL EQUIPMENT

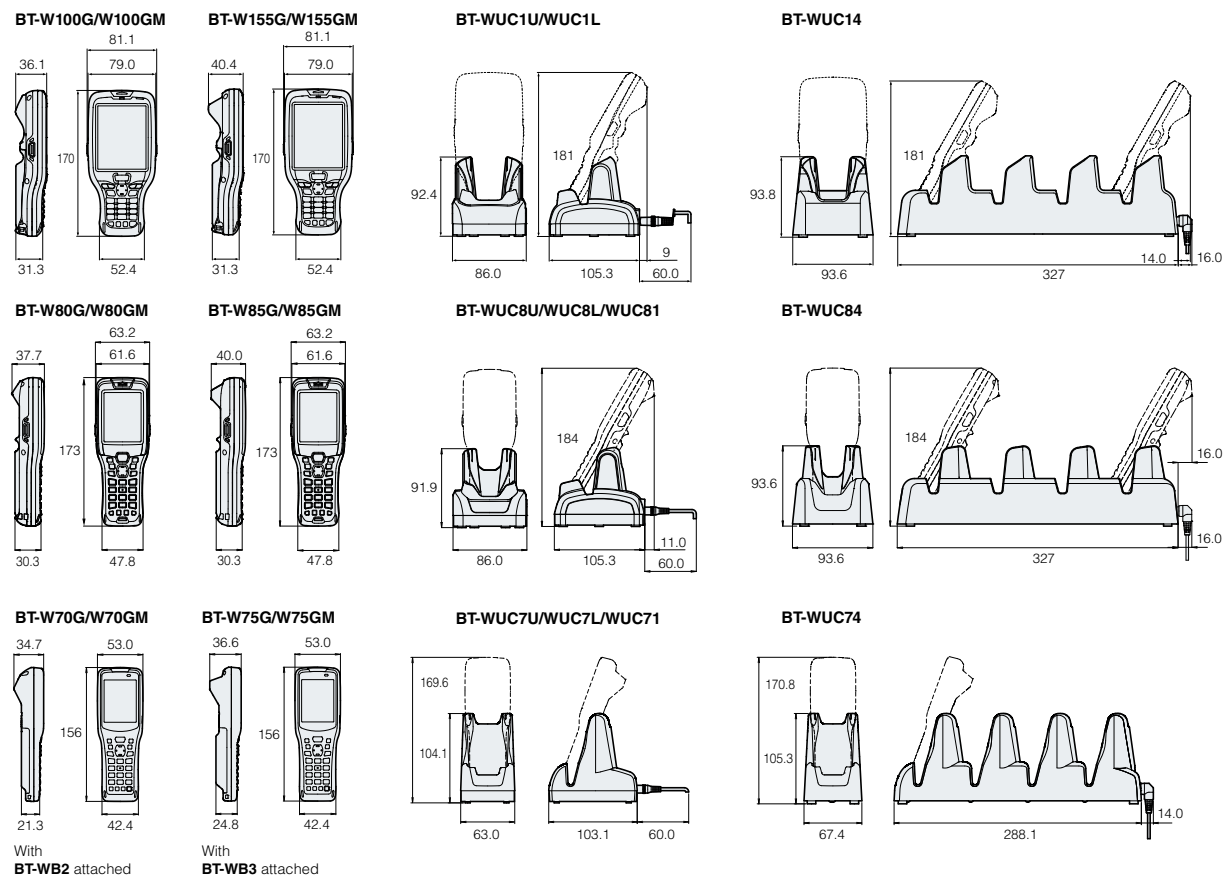
	Series	Model	Model Name
	BT-W100/W80	BT-WB1	Rechargeable Battery Pack
	BT-W70	BT-WB2	Standard Rechargeable Battery Pack
		BT-WB3	High-capacity Rechargeable Battery Pack
	BT-W100	BT-WUC14 (AC adapter included)	4-in-Line Charging Unit
	BT-W80	BT-WUC84 (AC adapter included)	
	BT-W70	BT-WUC74 (AC adapter included)	
	BT-W100/W80	BT-WCG14 (AC adapter included)	4-in-Line Charging Unit for Rechargeable Batteries
	BT-W70	BT-CG35 (AC adapter included)	5-in-Line Charging Unit for Rechargeable Batteries
		BT-A15	Spacers for Use with Rechargeable Batteries (5-spacer Set)
	BT-W100	OP-87723	Soft Case
	BT-W80	OP-87759	
	BT-W70	OP-87862	
	Common	BT-WHD1	Programme Development Kit
		BT-WHM1	Built-In Operation Management Software (BT Management Tool)

* The AC cable model varies depending on the country. For details, contact a KEYENCE sales representative.

	Series	Model	Model Name
	BT-W100	BT-WUC1U (AC adapter and USB cable included)	Communication and Charging Unit, USB Type
		BT-WUC1L (AC adapter included)	Communication and Charging Unit, LAN Type
	BT-W80	BT-WUC8U (AC adapter and USB cable included)	Communication and Charging Unit, USB Type
		BT-WUC8L (AC adapter included)	Communication and Charging Unit, LAN Type
		BT-WUC81 (AC adapter included)	Standalone Charging Unit
	BT-W70	BT-WUC7U (AC adapter and USB cable included)	Communication and Charging Unit, USB Type
		BT-WUC7L (AC adapter included)	Communication and Charging Unit, LAN Type
		BT-WUC71 (AC adapter included)	Standalone Charging Unit
	Common	OP-99xx2*	AC cable
	BT-W100	OP-87724	Belt Pouch
	BT-W80/W70	OP-87162	
	Common	OP-87164	Belt for Pouch
		OP-87163	Neck Strap
	Common	OP-87745 (1 strap is included with the terminal)	Wrist Strap (M) , 5-strap Set
	BT-W100	OP-87503	Hand Strap

DIMENSIONS

Unit: mm



• There are limits to the countries and areas in which the products included in this catalogue can be used. For details, contact a KEYENCE sales representative.

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Please visit: www.keyence.com



SAFETY INFORMATION

Please read the instruction manual carefully in order to safely operate any KEYENCE product.

GLOBAL NETWORK

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