



Handheld Computer

BT-A700 Series

Instant Reading at Any Range

1 inch to 30 feet away



BT-A700 Series

Incredibly Wide Reading Range at High Speed

Min. reading distance

1 inch*

6 feet

Handheld Computer
BT-A700 Series



Max. reading distance
30 feet*

Wide reading range and faster speeds equal higher work efficiency

Our new, full-range model is capable of reading codes from a minimum distance of 1 inch to a maximum distance of 30 feet. This enables users to quickly read codes not only while standing, but also while seated in a forklift for an even higher level of productivity.

Excellent one-handed operability

The reader is easy to point at the target and uses a gun-grip shape that fits easily in your hand. We combined the conventional design with intuitive keys enabling single-handed operation.



* This reader can scan codes at a minimum distance of 1 inch for barcodes with a narrow bar width of 0.5 mm 0.02" and at a maximum distance of 30 feet for barcodes with a narrow bar width of 1.5 mm 0.06".

High Reading Performance Boosts Productivity



Before — Reading from uncomfortable positions



After — Reading from comfortable positions

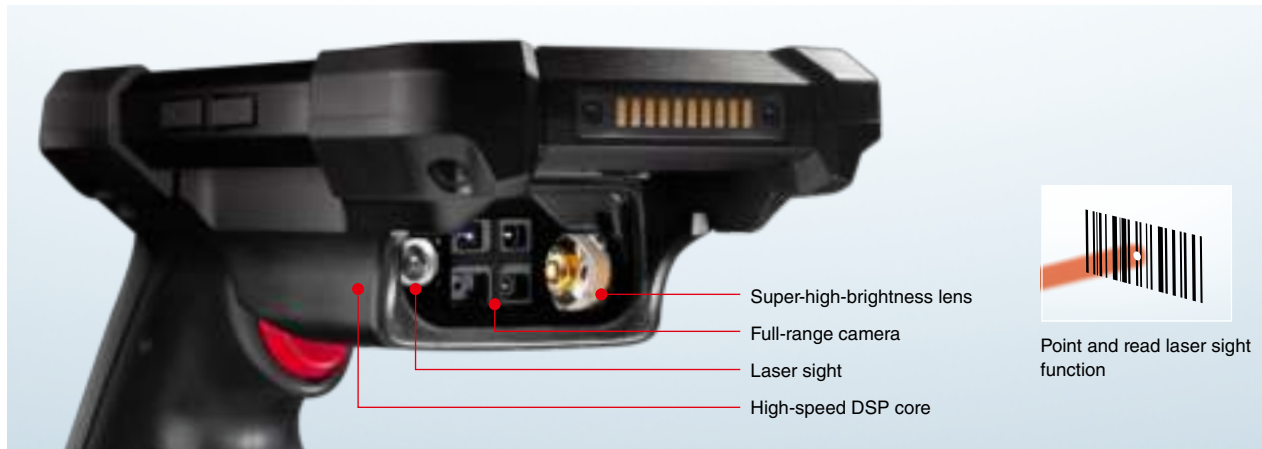


Before — Unreadable due to wrinkling



After — Readable even with wrinkles

Combining a full-range camera with an ultra-high-speed decoding process



Full-range camera

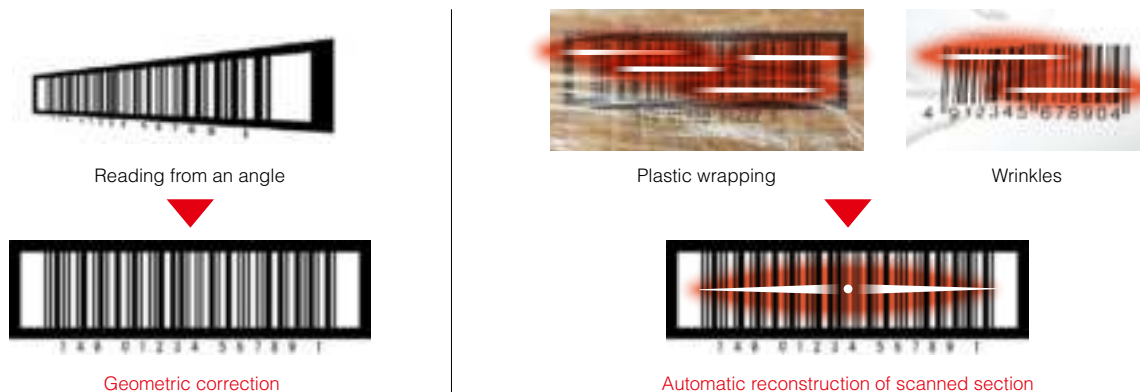
KEYENCE developed a proprietary full-range camera capable of capturing codes at the optimum focal point from near-range to far-range distances. This enables code reading across the entire range.

4-thread processing by DSP

A super-high-speed DSP core is used to simultaneously execute four parallel operations. This enables processing of the next captured image without waiting for the end of the decoding process for four times faster speeds.

Instant reading of challenging codes

KEYENCE's proprietary image processing algorithm enables accurate reading even for codes with poor legibility. This algorithm corrects images that are distorted or partially obscured by plastic wrap to provide quick and accurate reading for faster work speeds.



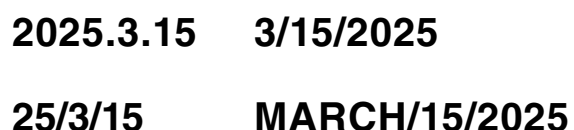
Reading characters and dates [BT-OCR1] The OCR license enables the Character Recognition Function

KEYENCE's OCR (Optical Character Recognition) technology enables reading various characters regardless of the font. The operations can be improved even if the barcode is not regularly used.

Various fonts



Various date formats



Large 5-inch Screen for Improving Work Efficiency



Direct keys for one-handed operation

Frequently-entered numbers, function keys, and other data can be entered directly with one hand. This allows you to perform the entire series of input operations, from reading codes to inputting quantities and final confirmation, using a single hand.



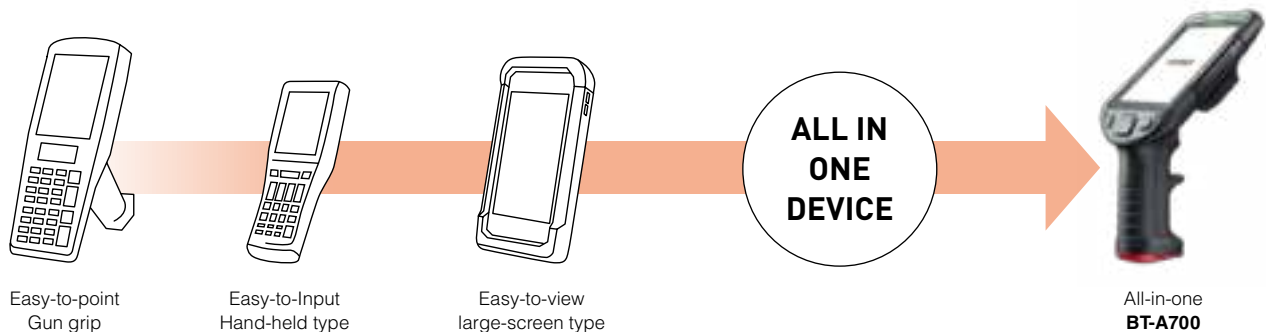
One-handed operation for higher work efficiency

Even for input operations that required both hands before, with the BT-A700, you can read the code and then input the quantity and confirm using a single hand.



All key benefits in a single device

The BT-A700 combines the powerful functions of conventional models into a simple, streamlined shape. The device design makes it easy to point, easy to hold, simple to operate, and provides high visibility to improve your work efficiency.



Durability to Handle Tough Conditions

Accumulated impact resistance

20000 times

* Impacts from 1 ft

Drop resistance

8 ft

* with Rubber Bumper



Impact and scratch resistant

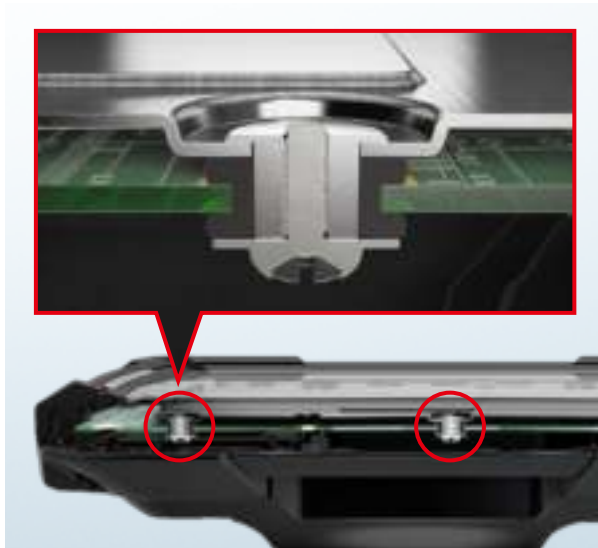
Gorilla Glass



Waterproof and dustproof

IP67 rating

Providing ultimate durability in a class of its own



Damper structure

The main PCB is mounted between dampers to obtain a floating design and protect against the effects of impacts.



Metal Frame

Key components, such as the display and main PCB, are protected by a metal chassis. This frame prevents deformation due to strong impacts to ensure longevity.



Rest hook

The grip design includes a rest hook to prevent dropping and distributes the device weight for a more lightweight feel.



Rubber Bumper

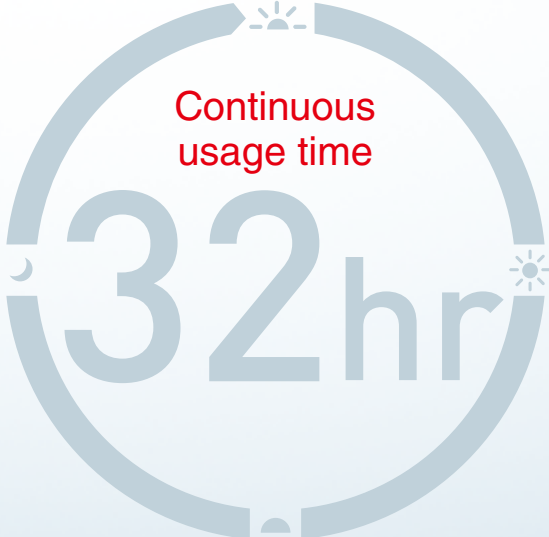
A special protector is used to add impact resistance. This protector provides security and peace of mind, even in harsh work environments.

High-capacity Battery for Continuous Operation



Backup power supply

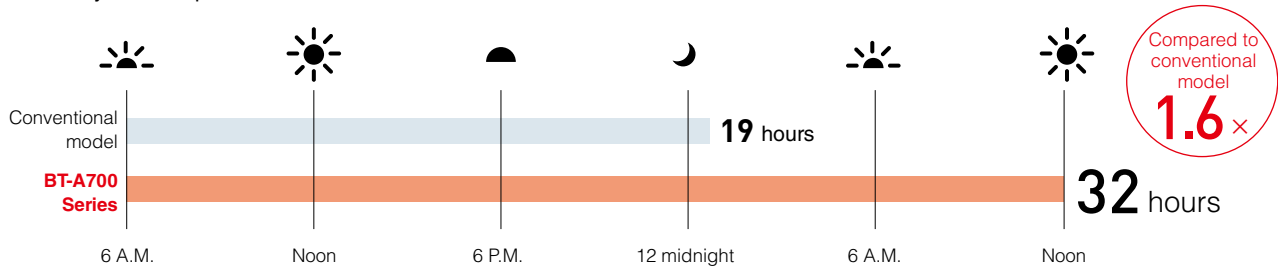
Large-capacity 2-cell battery





Includes 2-cell battery

The BT-A700 includes a high-capacity battery to enable usage over extended periods of time. This enables you to use the device all day without running out of power.

Battery Life Comparison



<p>Conventional model battery</p> <ul style="list-style-type: none"> • 1-cell battery 	<p>BT-A700 Series Cylindrical battery</p> <ul style="list-style-type: none"> • 2-cell battery • Optimal control of power consumption 
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Backup power supply for preventing work interruptions

Internal electric double-layer capacitors are provided as a backup power supply. This means that work is not interrupted even if the power supply is disconnected or when the battery is changed.

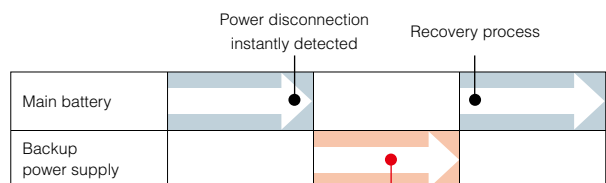


Drop impacts and other unexpected accidents

Replace the battery while the power is still on

Process when power supply disconnected

When power from the main battery is cut off, the BT-A700 instantly switches to the backup power supply. This enables you to immediately resume your work without restarting the device after replacing the main battery.



Instantly switches to backup power supply for protecting your valuable data

Built-in Implementation and Maintenance Support

BT Management Tool



Warehouse



Factory



Container yard



Store

Device monitoring

The operating conditions can be monitored by collecting device information from each remote site in real-time.

Device status

Easily check which devices are currently in use.

Remaining battery power

Visualize how much battery is left for each device.

Status	Device Name	SSID	Access Point	Battery	Travel Distance	Scan Count	Action	Last Refresh Date	Log Count (Days)
Online	ET-4700_01	4546	APO001	100%	3.22 mi	388 scans	[Icon]	Today at 3:47 AM	487 logs
Online	ET-4700_02	4546	APO001	71%	3.21 mi	402 scans	[Icon]	Today at 3:47 AM	728 logs
Online	ET-4700_03	4546	APO001	60%	3.25 mi	378 scans	[Icon]	Today at 3:48 AM	523 logs
Online	ET-4700_04	4546	APO001	51%	3.27 mi	362 scans	[Icon]	Today at 3:48 AM	487 logs
Online	ET-4700_05	4546	APO001	66%	3.25 mi	388 scans	[Icon]	Today at 3:48 AM	488 logs
Online	ET-4700_06	4546	APO002	94%	4.39 mi	374 scans	[Icon]	Today at 3:48 AM	388 logs

Connected access point

Determine where the device is located.

Loss prevention

The device can emit a beep to notify users of its location when accidentally left behind, allowing users to quickly find a device left on a shelf or accidentally packed with products.

Remote access

Remotely connect to a handheld computer to control the device or transfer files over a wireless network. Remote access also enables support and troubleshooting from a different location.

Device screen

View the device screen and perform real-time remote control.

File transfer screen

Upload/download files easily.

Operation log analysis

Detailed device information including wireless signal level and application status can be checked. The device will log operation history and screen captures to quickly determine the causes of failures and reduce time spent responding to problems.

Operation history

Detailed device history including operations, reading results, movements, battery status, and communication status can be checked.



Screen capture

Screen captures are collected and can be viewed to monitor application statuses.

Captured image

Images taken by the device camera are recorded to review situations such as damaged boxes or missing items.

Workload analysis

Access point grouping can enable quick analysis of the workload in a specific area. Checking the travel distance or workload in an area can help determine the best placement of personnel or shelving.

Grouping

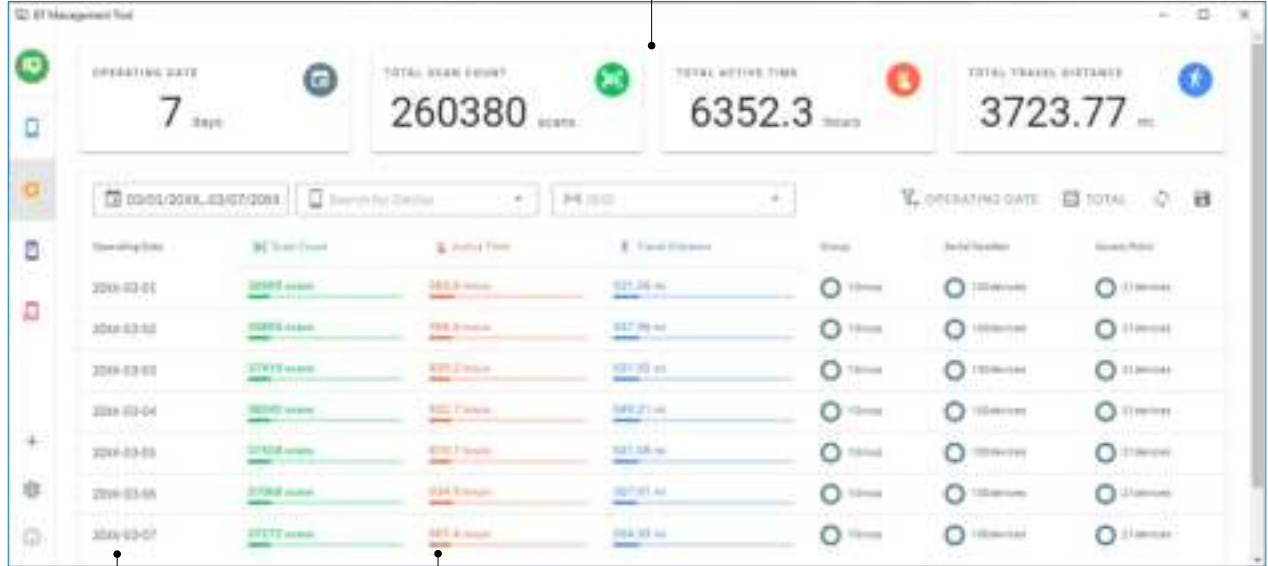
The devices can be grouped to better analyze workload by access point or operating date.

Total workload

The total workload information in a selected group is displayed.

Workload

The distance traveled with the device, scan count, and uptime are displayed.



The screenshot shows the RF Management Tool interface. At the top, there are four summary cards: 'OPERATING DATE' (7 days), 'TOTAL SCAN COUNT' (260380), 'TOTAL ACTIVE TIME' (6352.3), and 'TOTAL TRAVEL DISTANCE' (3723.77). Below these is a search bar and a table with columns: Operating Date, Scan Count, Active Time, Travel Distance, Group, Serial Number, and Scan Rate. The table lists data for dates from 2019-03-01 to 2019-03-07.

Device update

Update applications and system firmware remotely without visiting the worksite. Updates can also be scheduled to run automatically at night.

Update file type

Select from applications, system firmware, or kitting files.

Schedule settings

Devices can be automatically updated according to a configured schedule.




Lockdown Home Launcher for Optimization as Work Device

KEYENCE provides tools for limiting device use to just the applications and functions needed for work. The BT-A700 features a general-purpose OS, but it can also be used as a specialized work terminal for greater ease of operation and higher security.

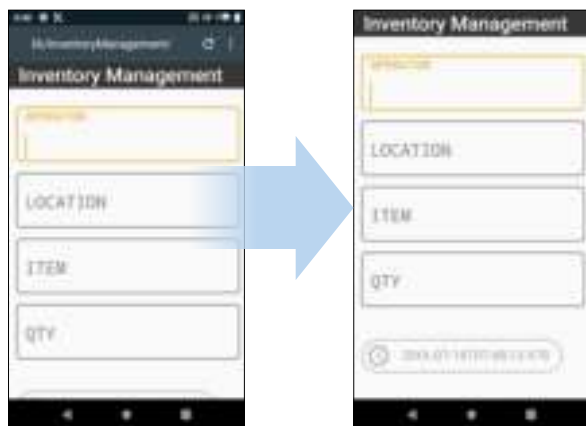


Customized Enterprise Browser

KEYENCE has developed a special browser with a wide range of useful features not found in general-purpose browsers.

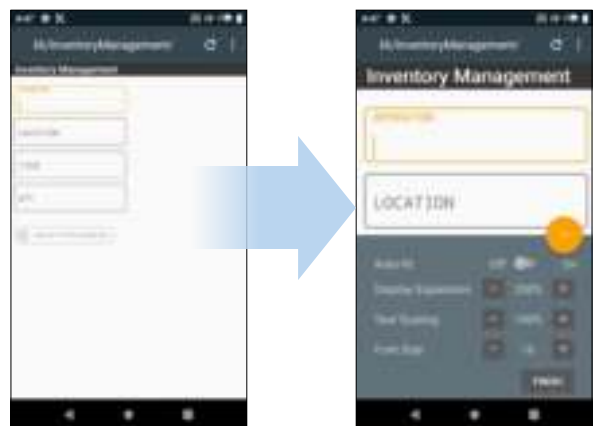
Full screen mode

The address bar is hidden to maximize application size and prevent access to unintended websites.



Size adjustment function

You can adjust the view size while watching the screen. This enables easy migration to the large-screen BT-A700 without modifying existing applications.



FREE TRIAL UNIT

We always recommend that customers purchase our products after evaluating actual performance on their production line. Customers may select the product of their choice and use it on a free trial basis before actually purchasing the product.

Visit us at the following website to get trial unit

www.keyence.com/bt_fretrial_request



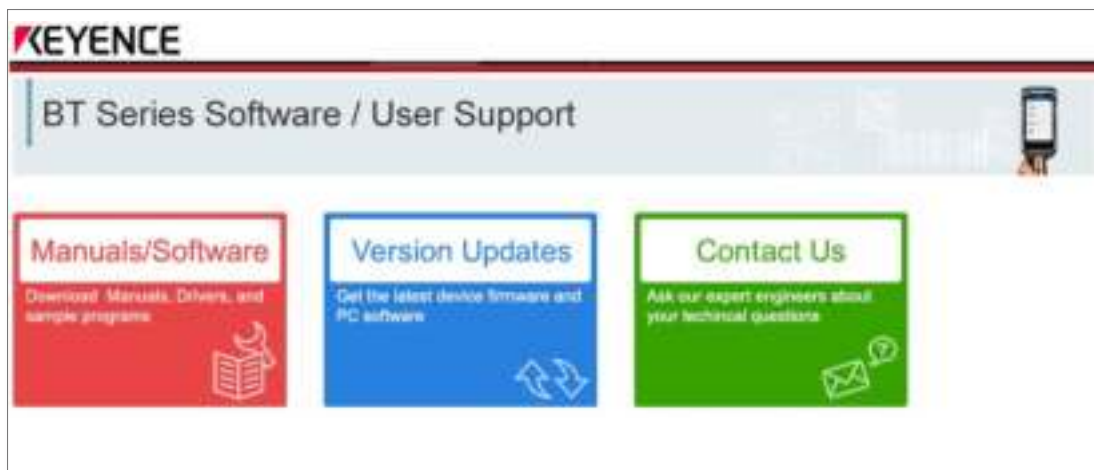
The screenshot shows the KEYENCE website's 'Request Free Trial' form. At the top left is the KEYENCE logo. Below it is the title 'Request Free Trial'. The form contains a photograph of various KEYENCE BT series products, including a sensor, a computer monitor, and a control panel. To the right of the image is a section titled 'Please check the item(s) you are interested in. (required)'. It includes four radio button options: 'I need a trial unit, contact me.' (which is selected), 'Please have a representative contact me.', 'I want to know the price.', and 'Other'.

SUPPORT PAGE FOR THE DEVELOPER

Access a rich collection of easy start-up guides, manuals, sample projects, and more. Visit KEYENCE's special website for information useful to customers.

Visit us at the following website for more information.

www.keyence.com/btus



Specifications

Model		BT-A700GA		
Controller	CPU	Qualcomm Octa-core		
	OS	Android™ 11		
Main memory	RAM	3 GB		
	ROM	32 GB		
Display	LCD	Type	5.0" TFT color LCD, IPS type	
		Resolution	720 x 1280	
		Backlight	High-intensity white LED	
	Operation Status LED	3-color LED (red, green, blue, yellow, cyan, magenta, white)		
Operations	Hard Keys	10 keys		
	Touch Panel	Electrostatic capacitance method (Gorilla Glass)		
Scanner	Reading Specification	Reading Light Source	High-intensity white LED	
		Pointer Light Source	Visible semiconductor laser (650 nm), Output 700 μW Class 2 laser product (IEC 60825-1)*1	
		Minimum Resolution	2D code: 0.191 mm 0.008" Barcode: 0.127 mm 0.005"	
		Reading Distance	80 to 1550 mm 3.15" to 61.02" (CODE39 narrow bar width: 0.254 mm 0.01") 25 to 4100 mm 0.98" to 161.42" (CODE39 narrow bar width: 0.508 mm 0.02") 100 to 370 mm 3.94" to 14.57" (QR cell size: 0.254 mm 0.01") 0 to 1200 mm 0" to 47.24" (QR cell size: 0.508 mm 0.02")	
		Reading Width (Field Range)	151 x 94 mm 5.94" x 3.70" (Reading distance: 300 mm 11.81")	
	Supported Code	JAN/EAN/UPC (add-on code support), CODE128, GS1-128, CODE39, NW-7 (Codabar), CODE93, ITF, COOP 2of5, Industrial 2of5, QR code, Micro QR, DataMatrix (ECC-200), PDF417, GS1 DataBar, Composite, Postal		
Wireless Communication	Wireless LAN	Wireless Radio	IEEE 802.11a/b/g/n/ac	
		Frequency Range	2.4 GHz (b, g, n: 1 to 11ch) 5.2 GHz, 5.3 GHz, 5.6 GHz, 5.8 GHz (a/n/ac) * W52/W53 can only be used indoors.	
		Security	Security: WEP (64/128 bit), WPA, WPA2 WPA encryption method: TKIP/AES Authentication: PSK, PEAP, EAP-TLS, EAP-TTLS, EAP-PWD	
	Bluetooth®	Wireless Standard	Bluetooth® V5.0 + BR/EDR/LE	
		Supported Profile	A2DP, AVRCP, BNEP, HID, HSP, IOPT, OPP, PAN, SPP	
		Distance	Approx. 10 m 32.8' (line-of-sight)	
Expansion Slot	Supported Media	micro SD/SDHC/SDXC UHS-I		
Power Source	Main Battery	Type	Dedicated lithium-ion battery pack	
		Capacity	6250 mAh	
		Continuous Usage Time	Approx. 32 hours*2	
	Backup battery	RAM data	Electric double-layer capacitors: 3 minutes*3*4	
Others	Audio	Speaker, Microphone		
	Vibration	Available		
	Camera	5 MP		
	Sensor	Accelerometer, Ambient Light, Gyroscope, Digital Compass		
Environmental Resistance	Enclosure Rating	IP67		
	Drop Resistance (multiple drops to concrete)	Onto concrete from 1.8 m 6' ; Up to 20000 impacts from 30 cm 1'		
	Operating Temperature	-20°C to +50°C -4.0°F to 122°F (No freezing)*5		
	Operation Humidity	20% to 85% RH (No condensation)		
	Storage Temperature	-20°C to +70°C -4.0°F to 140°F (No freezing)		
Dimensions	88 mm x 134 mm x 235 mm 3.46" x 5.28" x 9.25"			
Weight	Approx. 487 g 17.19 oz (with rechargeable battery pack attached)			

*1 The laser classification for FDA (CDRH) is implemented based on IEC60825-1 in accordance with the requirements of Laser Notice No.50.

*2 This is the continuous usage time with the operation confirmation LED and vibration function turned off, with the sound turned on (with low volume), with the backlight turned on (0%), at normal temperature, and when barcode reading is performed and round-trip wireless communication is made once per 20 seconds. This is a test value. The value is not guaranteed.

*3 This indicates the case when the main battery is not attached or the battery has no charge.

*4 This is a typical value, but not a guaranteed value.

*5 Due to the added load in sub-zero environments, the continuous usage time may be reduced significantly. Be sure to test the device before use in these environments.







- Products described in this catalog, with the exception of some models, are Japanese-specification models. The use of Japanese-specification models outside of Japan is not assumed.
- IEEE 802.11a/b/g/n/ac: These wireless LAN standards are set by the IEEE (Institute of Electrical and Electronics Engineers) 802 LAN/MAN Standards Committee responsible for formulating LAN technology standards.
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LASER WARNING/EXPLANATORY LABEL



Peripheral equipment

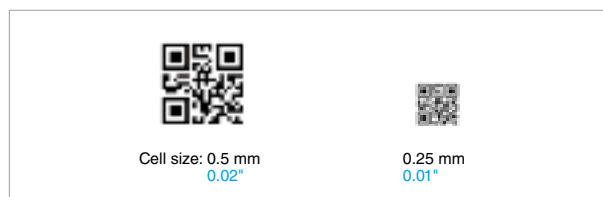
	Model	Model name
	BT-AB1	Rechargeable Li-ion Battery
	BT-AUC7UL (AC adapter included)	USB/LAN Communication Cradle
	BT-AUC74 (AC adapter included)	4-slot Charging Cradle
	BT-ACG74 (AC adapter included)	4-slot Battery Charger
	OP-99xx1*	AC Cable
	OP-51580	USB cable

	Model	Model name
	OP-88406	Rubber Bumper
	OP-88269	Holster
	OP-87164	Holster Belt
	OP-88407	Stylus Set (5 pcs) (attachment included)
	OP-88405	Screen Protector
	OP-87745	Wrist Strap Set (M), 5 straps
	BT-OCR1	OCR license
	BT-HMT1 BT-HMT2	BT Management Tool License

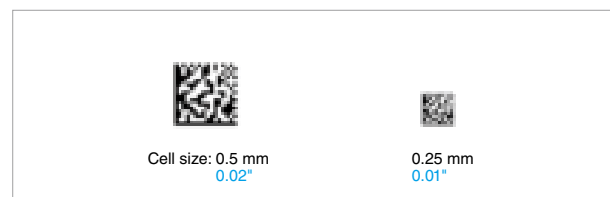
* The AC cable model varies depending on the country. For details, contact a KEYENCE sales representative.

Sample codes

QR code



DataMatrix



ITF (narrow bar width: 1.5 mm 0.06")





Compact Handheld Computer

BT-A500 Series

- High speed reading
- One-handed operation
- Industrial durability



PDA-type Handheld Computer

DX Series

- High speed reading
- Industrial durability
- Modular system



Logistics Code Reader

SR-5000 Series

- Wide field of view and long reading depth
- Ultra-high speed
- Easy installation and operation



Industrial Handheld Reader

HR-X Series

- AI-powered code reading
- Industrial durability
- Easy setup

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