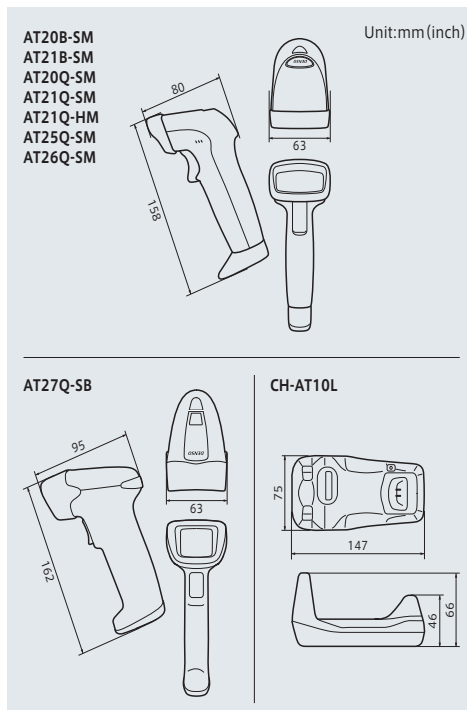


AT20 series specifications

Type	Barcode model				2D Code mode											
	AT20B-SM(R)	AT20B-SM(U)	AT21B-SM(R)	AT21B-SM(U)	LED marker type					Laser guide marker type						
Scanner	Advanced Scan Plus (CCD)				Area Sensor											
Method	-				QR code, Micro QR code, SQRC, iQR, Data Matrix (ECC200), PDF417, Micro PDF417, Maxi code, Aztec, GS1 Composite											
	EAN-13/8 (JAN-13/8), UPC-A/E, UPC/EAN (with add-on), Interleaved 2 of 5 (ITF), Standard 2 of 5 (STF), CODABAR (NW-7), CODE32, CODE39, CODE93, CODE128, GS1-128 (EAN-128), GS1 Databar (RSS), MSI, Plessey				EAN-13/8 (JAN-13/8), UPC-A/E, UPC/EAN (with add-on), Interleaved 2 of 5 (ITF), Standard 2 of 5 (STF), CODABAR (NW-7), CODE39, CODE93, CODE128, GS1-128 (EAN-128), GS1 Databar (RSS)											
Minimum resolution	-				0.167mm		0.125mm		0.167mm							
	-				0.125mm		0.10mm		0.125mm							
Marker	-				LED marker					Area guide marker						
Angle	±50°															
Skew angle	-															
Image capture	BMP, JPEG output, thumbnail view															
Scanning confirmation	Confirmation LED (Blue, Green, Red), Buzzer (with 3-level volume control and 3-level tone control)												Confirmation LED(Blue, Green, Red, Orange), Buzzer (with 3-level volume control and 3-level tone control)			
Communication interface	Method	RS-232C	USB (COM, HID) ²	RS-232C	USB (COM, HID) ²	RS-232C	USB (COM, HID) ²	RS-232C	USB (COM, HID) ²	RS-232C	USB (COM, HID) ²	RS-232C	USB (COM, HID) ²	RS-232C	USB (COM, HID) ²	Bluetooth Ver.2.1+EDR based class2
	Connector	Dsub-9S	USB connector (A type)	Dsub-9S	USB connector (A type)	Dsub-9S	USB connector (A type)	Dsub-9S	USB connector (A type)	Dsub-9S	USB connector (A type)	Dsub-9S	USB connector (A type)	Dsub-9S	USB connector (A type)	-
	Profile	-														
Power	Cable	2m straight cable														
	Operating time ³	-														
Environment requirements	Dust-proof, Drip-proof	IP42														
	Drop impact resistance ⁴	2.0 m/0.2 m × 100,000 times												1.8 m high over a concrete floor with each of 6 sides of the enclosure facing down.		
	Operating humidity	10 to 90% RH (without dews)														
	Operating temperature	-5~50°C														
	Operating illumination	0 to 10,000 lx (Fluorescent lamp in daytime)														
Enclosure color	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black	White	White
Weight (excl. cable)	Approx. 105 g (excl. cable)				Approx. 110 g (excl. cable)										Approx. 200 g (incl. battery)	

*1: External case of the Bluetooth model is a different with the wired model. *2: Two methods are supported: a USB keyboard interface and a USB-COM interface. The factory default is a USB keyboard interface (Using new and fully charged battery). *3: With one reading pass over a 5 s period. *4: These are test values, but not guaranteed values.

Dimensions



Product configuration

Accessories

2D code model-1D barcode model (standard type)

- Scanner
- Interface cable
- AC adaptor (Only for RS-232C model with AC adaptor)
- Operation Guide

Instruction manual

Bluetooth® model

- Scanner (Including battery SB-10L)
- Recharger (CH-AT10L)
- AC adaptor
- Hang Strap
- Operation Guide

Instruction manual

Bluetooth communication unit (BA11-RKU) is separately sold

Items with this mark can be downloaded on can be downloaded on our webpages for free.

Optional accessories (Separately sold)

2D code model-1D barcode model (RC-232, USB I/F type)

- Stand [S-AT20 (White)] [S-AT21 (Black)]
- Hands-free stand [H-AT20 (White)] [H-AT21 (Black)] [H-AT20-2 (White)]
- Stand[S-AT10]
- Hands-free stand[H-AT10]
- Bluetooth communication unit to communicate with Non Bluetooth device[BA11-RKU]



Note : BA11-RKU support 4 I/F types. Please refer to our website for more information.

Software

- USB driver [Active USB-COM port driver]
- Setting software [Scanner Setting (for barcode models)] [Scanner Setting 2D (for 2D code models)] [BA Setting (for BA11-RKU)]
- Keyboard emulation software [QR_kbif3.0]

For details on these products, see this webpage. <http://www.denso-wave.com/en/adcd/>

- QR Code, SQRC, and Advanced Scan are registered trademarks of DENSO WAVE Incorporated.
- Appearance and specifications may be changed without prior notice for improvement.
- Data on this catalog are as of July 2014.

DENSO WAVE INCORPORATED

AT20 SERIES



2D code model

- LED marker type
 - AT20Q-SM (White)
 - AT21Q-SM (Black)
 - NEW AT21Q-HM (high resolution)
- Laser guide marker type
 - AT25Q-SM (White)
 - AT26Q-SM (Black)
 - AT27Q-SB(Bluetooth®)



Barcode model

- AT20B-SM (White)
- AT21B-SM (Black)



Improved readability
Readable from any direction (360°)
※ Only 2D code model



Easy to use and less straining for anyone
Compact, lightweight body - Highest level in the class



You do not have to worry about accidental falls.
Survive a 2 m drop - Highest level in the class



※ For global use of the Bluetooth model, please contact us.



Bluetooth® model

AT27Q-SB

You want to facilitate your task.

It is troublesome to consider scanning direction.

So High-speed shutter & readability from any direction (360°)



You can improve your work efficiency by the high-speed shutter that enables operation not affected by camera shake, and readability from any direction.



Barcodes can be scanned from any direction. Both horizontal and vertical scanning are possible.

It is difficult to read a wide barcode with a 2D code scanner.

So Wide-angle scanning, improved readability



The number of horizontal pixels is increased and reading algorithms improved. Readability for wide barcodes used for public utility bills, medical bills, etc. is improved.



NEW It is convenient if there is a scanner compatible with any length of barcodes from small to wide barcodes.

So Improved resolution useful for various businesses



The lineup includes a high resolution model capable of scanning barcodes of up to 0.10 mm and 2D codes of up to 0.125 mm. This specific model can be used in various environments, including factories, hospitals, and stores. ※ AT21Q-HM



Material labels

Medical labels

Electronic parts

It takes time to read multi-row barcodes.



So Multi-row barcodes can be read at one time.

The scanner can read two-row barcodes of books and up to three-row other barcodes. Decrease in the reading frequency can lead to drastic reduction in working hours.



AT20Q

AT20Q can read both QR codes® and barcodes. It is a hybrid scanner with two functions



More efficient, more convenient

You want to read a membership certificate or coupon displayed on a mobile phone screen.

So Possible to read barcodes on mobile phone LCD screen



The newly developed unique LED illumination control function is incorporated in the scanner to suppress specular reflection. The device can quickly read barcodes on mobile phone LCD screens.



You want to consider the safety of operators as well as customers.

So Eye-friendly LED marker



In addition to the laser guide marker-type model, which is already on the market, the LED marker-type model that indicates the scanning area has been released. The scanner considers the safety of eyes, ideal for the use in service industries such as supermarkets.



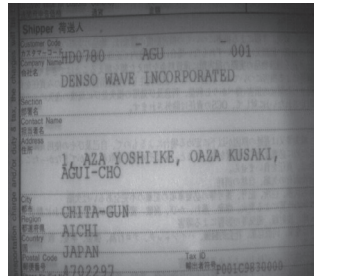
You want to take pictures of bills used for home delivery service, etc.

So Easy-to-use image capture function



The scanner can read not only barcodes but also take pictures. The device enables you to easily read even small characters. This function is useful particularly for logistics and transportation industries dealing with bills.

(One JPEG image can be transferred within one second in the case of USB connection.)



You do not want to take time to scan.

So Scans at twice the speed of previous models

DENSO's Advanced Scan Plus technology gives the AT20B twice the scanning speed of previous models, increasing the efficiency of operations such as continuous barcode scanning for product inspection.



You want to quickly read barcodes short distance away from you.

So Super-deep scanning field depth enabling quick reading of barcodes a short distance away from you

The AT20B enables super-deep-field scanning compatible with a variety of tasks, from close-up scanning to distant scanning, making it possible to perform smooth scanning regardless of the scanner's position.

Incorporated with many user-friendly and unique functions of DENSO

One of the lightest products in this class



Weighing about 110 g, this model is one of the lightest products in this class. Users are less likely to feel fatigue even after many hours of use. (The Bluetooth model weighs about 200 g.)

Usable worldwide



DENSO Group companies operating in different parts of the world offer seamless service from sales to maintenance.

Areas covered for the AT20 series Japan, Europe, Australia, North America, and Asia

※ For details, please contact our sales staff.
※ For global use of the Bluetooth model, please contact us.

Accidents may happen during your work.

So Ability to withstand a 2-meter drop impact



In addition to the lightweight body, impact buffer materials and a highly durable case are used to possess the ability to withstand a 2-meter drop impact, the highest standard in the class. The device can also resist 100,000 time falls from the height of 20 cm, considering more ordinary troubles during actual use.



Scanning of a large volume of data may strain your arm.

So Smooth automatic scanning by attaching the scanner to a hands-free stand



The scanner can be used not only by holding it, but also by attaching it to a hands-free stand for scanning. You can use the scanner usually by setting it to a hands-free stand, while by holding the scanner in the hand when scanning a label attached to a large item that you cannot carry.



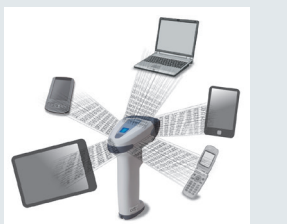
With no label present, the scanner is on standby.

When a label is placed in view, scanning begins.

Bluetooth model (AT27Q-SB) can be wireless connected to a various devices

Connect to a table computer and smartphone

In addition to the SPP profile, AT27Q-SB supports the HID profile. The HID profile allows the user to connect to not only a PC, PDA but a tablet computer, smartphone.



AT27Q-SB

Long battery life + Rapid charge

Specialized charger (CH-AT10L) charges in 2.5 hours. Battery operation of up to 28 hours* allow the user to work a whole day.

*With one reading pass over a 5s period.



28 hours operation*