DENSO

DENSO WAVE

HIGH-SPEED UHF RFID SCANNER

SP1

SERIES

Knows no

Limits.

0 - 700 Scans.
in one Second!

The SP1 RFID scanner offers a reading speed of up to 700 tags/s and a reading range of up to 13 metres, exceeding its scanner category with a never seen before best-of-class performance, as well as offering an enormous increase in data capture efficiency. This IP54-certified high-tech device integrates seamlessly in existing environments, because the SP1 can be connected to virtually any smart device via Bluetooth by simply reading a QR code® printed on the side of the unit.

ERGONOMIC:

The ergonomically designed grip ensures a comfortable and easy handling.

SMART CONNECTIVITY:

Android™ or iOS – the SP1 connects quickly and easily to any smart device.

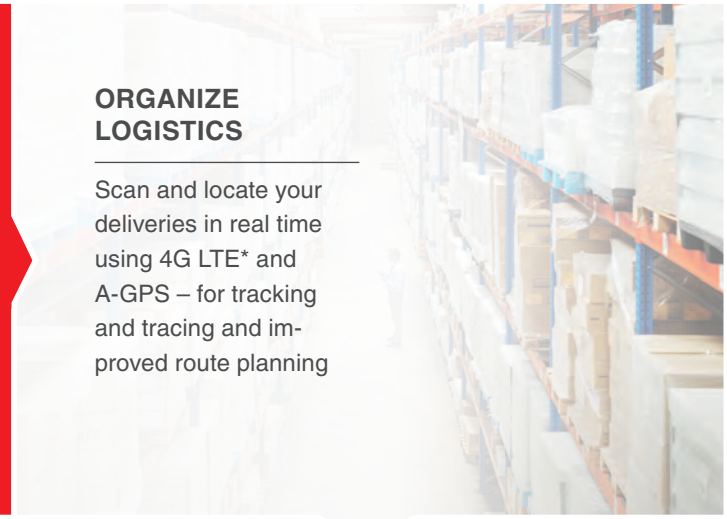
CHARGED WITH IDEAS:

While the SP1 is sitting in its cradle and charging, you can simultaneously recharge another smart device via the integrated USB port on the cradle.

Welcome to efficiency overdrive.

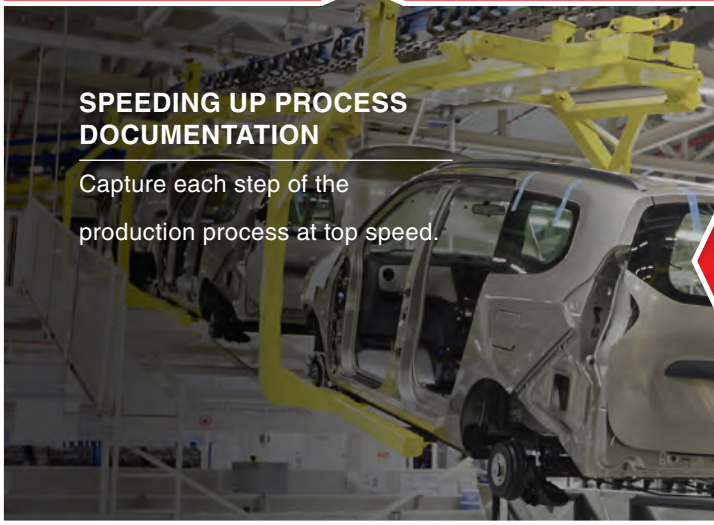
The new SP1 speeds up processes by up to 50%. We have achieved an increase in efficiency in endurance tests based on ongoing optimisations, this was done in our 20 sqm EMV chamber with a demo shop encompassing over 2000 items. This is where we conduct soundproof absolute measurements under realistic conditions with a clear objective in mind: to pave the way for our customers to pass into the overtaking lane.

Three examples for countless possibilities to work more efficiently



ORGANIZE LOGISTICS

Scan and locate your deliveries in real time using 4G LTE* and A-GPS – for tracking and tracing and improved route planning



SPEEDING UP PROCESS DOCUMENTATION

Capture each step of the production process at top speed.

PROFESSIONALISE RETAIL

Whether it's for warehousing, ordering or sales management, collect data with precision – even if codes are damaged.

Faster, easier, further.

All performance values at a glance.

Reads 1D, 2D codes and RFID tags

even if codes are damaged.

Easy Bluetooth pairing

1. Use the host unit to read the QR Code® to the SP1.
2. The devices are paired via Bluetooth.

13m* x 360°
= ca. 530m²

SP1 allows high-speed scanning at distances up to 13 m*, covering an area of up to 530m².

Cross-dipole antenna

reads RFID tags with any directionality.

Internal memory

Allows the caching of 80,000 RFID tags and 1,000 barcodes to bridge connection interruptions between the host device and the SP1 cradle.

* depending on operation environment. Value is based on Avery Dennison AD-229r6

Top marks
for reliability.

1 YEAR

Warranty

Battery life

extended for long operating hours.

Most reliable performance under extreme conditions between **-20° and +50° degrees Celsius.**

1,50 Metres

Exhaustively crash-tested

At heights up to 1.5 m.

Ultra-lightweight:

only 298 g (with standard battery); max. 450 g (with high capacity battery).

IP54-certified

watertight and dustproof.

RFID TUNING FOR SMART DEVICES.

The SP1 attachments now bring all the advantages of RFID and makes them available for your existing smart devices. With BHT-1800 or Quad Lock rotary attachment for Android™ and iOS devices - SP1 is always ready to connect for an uncomplicated top performance.

For BHT-1800:
EA-SP1-A1800

Versatile fixator:
EA-SP1-AS

SP1 SERIES

Model				SP1-QUBi
Scanning Unit	RFID	Supported RF tags		ISO/IEC 1800-63 Type C (EPCglobal Class 1 Gen 2 compatible tags
		Frequency		865.7 ~ 867.5 MHz
		Channel separation / Number of channels		200 KHz 6 ch
		Transmission output		Up to 1 W
		Modulation		PR-ASK
		Scanning speed*1		700 Tags per second
		Scanning distance*2		Approx. 8 m
		Output adjustment		10dBm ~30dBm
	Scanner	Reading system		Area sensor
		Readable codes	2D Codes	QR Code, Micro QR Code, SQRC, PDF417, Micro PDF417, MaxiCode, DataMatrix (ECC200), GS1 DataBar Composite (EAN, UCC Composite)
			1D Codes	EAN-13/-8 (Jan-13/-8), UPC-A/-E, UPC/EAN (with add-on), Interleaved 2 of 5, CODABAR (NW-7), CODE39, CODE93, CODE128, GS1-128 (EAN-128), GS1 Databar (RSS)
		Minimum resolution	2D Codes	0.167 mm
			1D Codes	0.125 mm
		PCS value		0.3 or more
		Elevation / tilt angle		± 50°
		Scan confirmation		Blue/Red 2-colour LED, buzzer
Transmitter	Bluetooth®			V2.1 + EDR Standard Class 2
	Profile			SPP
	Cradle			USB
Power supply	Main battery			Lithium-ion battery 2900 mAh (BT-SP1LA) / 5800 mAh (BT-SP1L)
	Operating time*3	Standard battery		Approx. 4 hours
		High capacity battery		Approx. 8 hours
Internal memory				80,000 RFID tags, 1,000 barcodes
Environmental requirements	Operating temperature*4			-20°C to 55°C
	Protection rating			IP54
	Drop restiance*5			30 drops from 1.2 m onto concrete (5x on each of 6 faces), 1.5 m
EMC standard				VCCI ClassA
Weight				Approx. 400 g (with standard battery) Approx. 450 g (with high capacity battery)

*1: Scanning speed is a reference value and varies depending on the actual operating environment. *2: Scanning distance is a reference value and varies depending on the actual operation environment. Communication distance varies depending on the actual tags. Evaluations are based on the Avery Dennison AD-229r6. *3: Reference values using DENSO Wave conditions at room temperature. May vary depending on the actual operating conditions. *4: 0°C to 40°C for charging. Operation between -10°C and -20°C possible only using high capacity battery. Operating restrictions apply between -10°C and -20°C and between 40°C and 55°C. *5: Test figures at room temperature. Do not constitute guaranteed values. *6: For use with both batteries *7: Does not include smart device charging funtion. *8: Does not support USB interface *9: Attachements cannot be attached/detached from SP1 with shoulder strap.

ACCESSORIES (sold separately)

Communication / Charger

- CU-SP1A (USB 2.1 Full Speed communication unit)
- CH-1804 (4 slot battery charger)*6
- CH-SP1L (4 slot unit charger)*7
- CBSP-US2000/4 (USB 2.1 Full Speed Direct cable)
- CBBHTUS500/C18-4A (BHT-1800 charging cable)*8

Others

- Waist case
- Shoulder strap*9

COMPONENTS

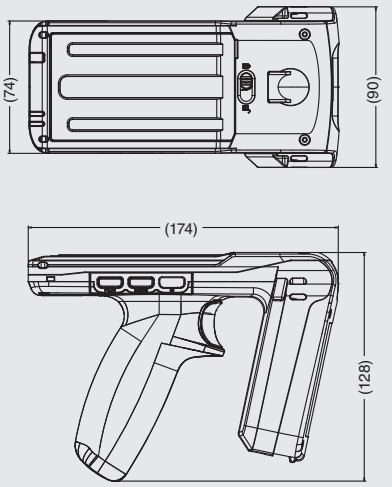
- Main unit
- Hand strap
- Operating guide

SOFTWARE

Software

- Google Android™ Studio
- Microsoft Visual Studion 2017
- Android SDK, including sample code and Demo Application HPI
- Development in: C# C++, Java and Xamarin

DIMENSIONS



HPI Items with this mark are available from the DENSO WAVE website (QBdirect) free of charge.

DENSO

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For more information, please visit our website
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TO USE THIS PRODUCT SAFELY Before using this product, read its User´s Manual thoroughly.

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