



keonn

RFID
Systems

AdvanScan™

Cloud-based RFID
handheld reader





Benefits:

- Increase of product availability
- Reduction of out-of-stocks
- Reduction of shrinkage
- Very easy to use: needs only 3 clicks to make an inventory and upload it to the cloud
- Plug and play
- No need of an external computer

Applications:

- Retail stores
- Libraries
- Hospitals
- Industries
- Warehouses

Product overview

AdvanScan is an **RFID inventory and encoding system** based on an Android-based handheld reader with a smartphone, and **direct upload** of data **to the cloud** or to a specific server.

AdvanScan obtains the inventory of products in a space with a **high read-rate** (typically above 98%), and uploads the inventory data to the cloud (AdvanCloud).

AdvanScan works with WiFi and avoids the need to use any local computer. It's **plug & play**.

AdvanScan improves many business processes. Among them:

- **Goods in:** verifying that the received products are correct against an ASN (Advance Shipping Notice)
- **Inventory**
- **Pick list:** items to take from the backroom to the sales floor
- **Discrepancies:** differences between the RFID inventory and the stock in the IT system of the retailer
- **Returns:** items to send back to the distribution centre or to another store

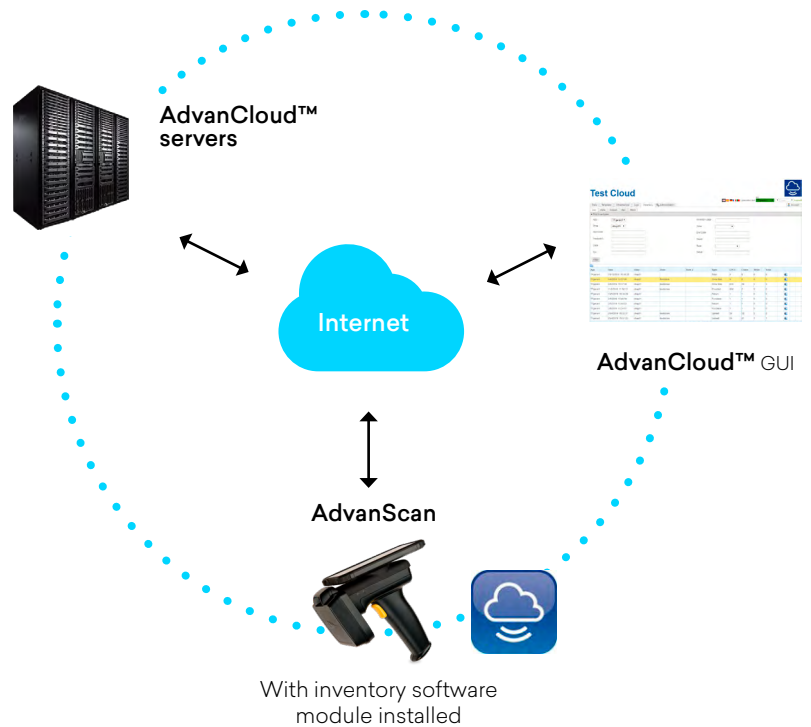
AdvanScan can be used for encoding RFID tags on its own or with an RFID printer, by combining it with AdvanPrint (RFID printer solution).

This illustration shows the available functions.



The process is as follows:

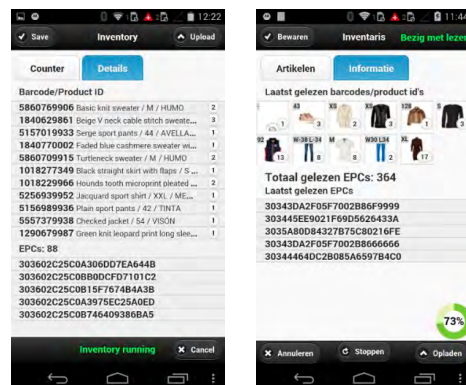
1. The user opens “SCloud” app on AdvanScan
2. The user clicks on “Create new inventory” or selects an unfinished inventory for continuing with it
3. The user waves AdvanScan near the items and hears a “beep” sound while tags are being read
4. While AdvanScan is reading tags, it also downloads from the cloud descriptive information and images of the products, and shows them on the screen
5. When Inventory is finished, the user uploads the data to the cloud by clicking “upload to the cloud”



Product features

AdvanScan is designed to read and write to EPC Class 1 Gen 2 (ISO 18000-6C) tags.

AdvanScan can make a **visual inventory**: product description and images of the read items can be shown on the screen. This allows the user to easily verify which products have been identified, accelerating processes and reducing errors.



AdvanScan is available with 3 different handheld reader models.

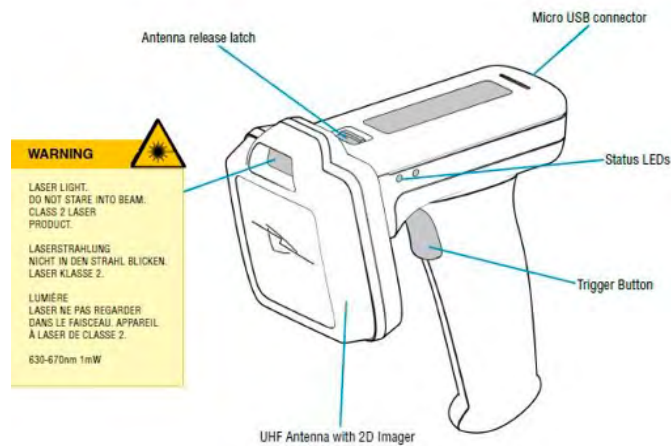
Mechanical specifications of handheld model 1: with 2W output power and recharging cradle



Technical specifications of handheld model 1

Operating Frequency	865MHz-868MHz / 920-925MHz / 902-928MHz
CPU	Cortex-A53 Octa-core 2.5GHz
RAM+ROM	3GB+32GB
Operating System	Android 8.1
Communication	IEEE802.11 a/b/g/n/ac, 2.4G/5G dual-band, internal antenna 4G Location services
Power supply	Li-ion, rechargeable, 8000mAh
Output Power	2W (33 dBm)
Interface	USB 2.0 Type-C, OTG
Transponder Protocol Standard	EPC C1 GEN2 / ISO18000-6C
Antenna	Circular polarization (4dBi)
Barcode scanning imager	Included
Sensors	Gravity sensor, light sensor, proximity sensor
Temperature range	-4oF to 122oF / -20oC to 50oC
Humidity	5%RH - 95%RH non condensing
Sealing	Host IP65 per IEC sealing specifications
Dimensions	164.2 x 80.0 x 24.3 mm 6.46 x 3.15 x 0.96 in
Weight	654 g / 23.07 oz
Color	Black
Display	5.2" IPS FHD 1920x1080
Touch panel	Corning Gorilla Glass, multi-touch panel, gloves and wet hands supported

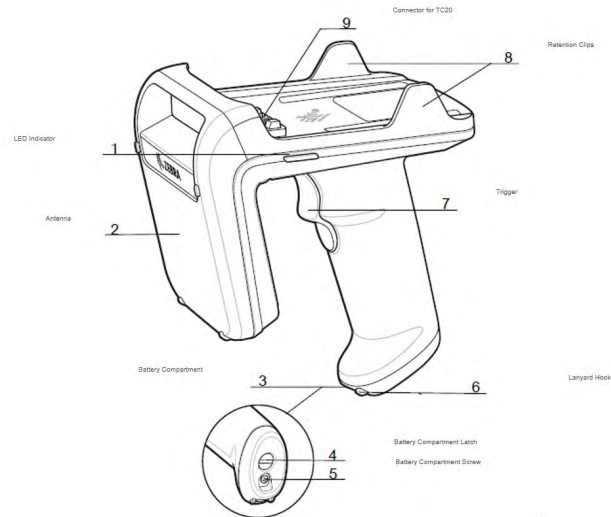
Mechanical specifications of handheld model 2: with 29 dBm output power and recharger, big screen



Technical specifications of handheld model 2

Operating Frequency	865-868 MHz, 902- 928 MHz
Compatible host devices	Android
User indicators	Speaker, vibration motor, LED
Power supply	Removable, rechargeable 4.2 volt Lithium Polymer 2200 mAh battery pack, 8.4 watt hrs
Output Power	10mW to 800mW
Interface	Bluetooth
Transponder Protocol Standard	EPC Class1 Gen2
Nominal read range	Up to 4m / up to 13 ft.
Nominal write range	Up to 1.22 m / up to 4 ft.
RFID performance field	150-degree forward facing (approx.) measured from front of device
Antenna	Detachable, Circularly Polarized with optional 2D scanner
Barcode scanning imager	Motorola SE4500 2D imager
Sensor resolution	752 x 480 pixels
Barcode scanning field of view	Horizontal: 40°, Vertical: 25°
Temperature range	-20°C to +60°C
Dimensions	18.0 cm x 17.5 cm x 7.5 cm 7.1 in x 6.9 in x 2.9 in
Material Housing	Polycarbonate
Weight	580 g (1.28 lb)
Color	Black
General regulatory	Approved for use in the US, Canada, Europe, China, Singapore, Taiwan, Korea and Australia
Electrical Safety regulatory	Certified to UL60950-1, CSA C22.2 No. 60950-1, IEC 60950-1, EN 60950-1
EMI/RFI regulatory	USA: FCC Part 15 Canada: ICES 003 Class B EU: EN 301 489-3, EN 301 489-1, EN 301 489-17, EN 302-208, EN55022 Class B, EN55024
Laser Safety regulatory	IEC Class2/FDA Class II in accordance with IEC60825-1/EN60825-1, 21CFR1040.10

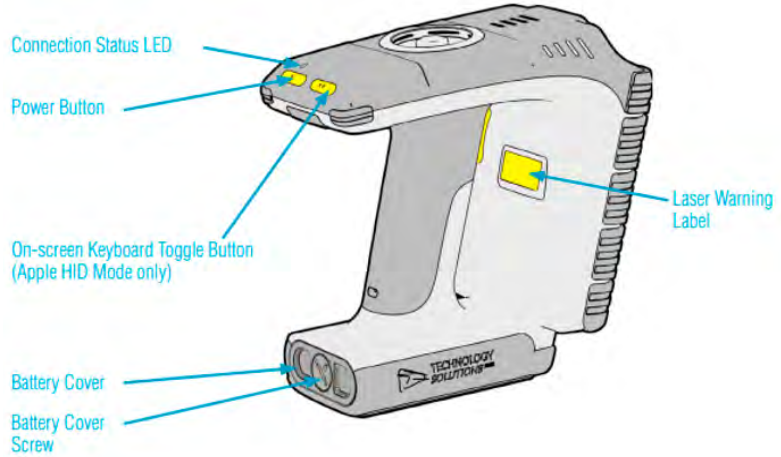
Mechanical specifications of handheld model 3: with 1W output power and recharging cradle



Technical specifications of handheld model 3

Operating Frequency	US: 902-928MHz; 0 – 30 dBm (EIRP) EU: 865-868MHz; 0 – 30 dBm (EIRP) Japan: 916-921MHz (w LBT), 0 – 30 dBm (EIRP)
Compatible host devices	Zebra TC20 mobile computer
Host connection	Electrical 8-pin connection
User indicators	LEDs
User input	Trigger
Power supply	PowerPrecision+ Li-Ion 3160 mAh battery
Interface	Electrical 8-pin connection
Transponder Protocol Standard	EPC Class1 Gen2; EPC Gen2 V2
Read rate	Up to 700 tags/sec
Nominal read range	19.7+ ft. / 6+ m
Temperature range	-10°C to 50°C / 14°F to 122°F
Dimensions	5.9 in. x 3.1 in. x 5.2 in. 14.9 cm x 7.9 cm x 13.3 cm
Weight	10.9 oz. / 310 grams (sled with battery)
Color	Black
Accessories	1-Slot Charging Cradle 5-Slote Charging Cradle
Electrical Safety regulatory	UL 60950-1, CAN/CSA C22.2 No. 60950-1, IEC 60950-1, EN 60950-1
EMI/EMC regulatory	FCC Part 15 Subpart B Class B; ICES 003 Class B; EN 301 489-1; EN 301 489-3; EN55024; EN 55032 Class B
RF Exposure	EU: EN 50364, EN 62369-1, EN 50566, EN 62311; USA: FCC Part 2, 1093 OET Bulletin 65 Supplement 'C'; Canada: RSS-102

Mechanical specifications of handheld model 4: with 1W output power and cradle



Technical specifications of handheld model 4

Operating Frequency	865-868 MHz, 902- 928 MHz
Compatible host devices	Android
User indicators	Speaker, vibration motor, LED
Power supply	Rechargeable Lithium Ion removable battery pack (11.25V, 2950mAh, 33.2Wh)
Output Power	10mW to 1 W
Interface	Bluetooth
Transponder Protocol Standard	EPC Class1 Gen2
Nominal read range	Up to 6m / up to 19 ft.
RFID performance field	110-degree forward facing (approx.) measured from front of device
Antenna	Circularly Polarized
Barcode scanning imager	Motorola SE4500 2D imager, Intermec EX25
Sensor resolution	752 x 480 pixels
Barcode scanning field of view	Horizontal: 40°, Vertical: 25°
Temperature range	-20°C to +55°C / -4°F to 131°F
Dimensions	177 x 94 x 170 mm (LxWxH) 6.9 in x 3.7 in x 6.7 in
Material Housing	Polycarbonate and TPU
Weight	860 g (1.89 lb)
Color	Black
General regulatory	Approved for use in the US, EU and Australia
Electrical Safety regulatory	UL60950-1, CSA C22.2 No. 60950-1, IEC 60950-1, EN 60950-1
EMI/RFI regulatory	USA: FCC Part 15, EU: EN 301 489-3, EN 301 489-1, EN 301 489-17, EN 302-208, EN55022 Class B, EN55024
Laser Safety regulatory	IEC Class2/FDA Class II in accordance with IEC60825-1/EN60825-1, 21CFR1040.10

Product codes for ordering

ADSN	-	B	-	M	-	H	-	FF	
									B = Handheld Brand
		CHW							Handheld 1
		TSL							Handhelds 2 and 4
		Zebra							Handheld 3
									M = Model
				C72					Handheld model 1
				1128					Handheld model 2
				RFD2000					Handheld model 3
				1166					Handheld model 4
									H = Host device
						001			Handheld 1
						X001			Handheld 2 and 4
						TC20			Handheld 3
									FF = Frequency bands
								EU	865,6 MHz - 867,6 MHz
								US	902,0 MHz - 928,0 MHz
								IN	865,0 MHz - 867,0 MHz
								AU	918,0 MHz - 926,0 MHz
								CN	920,5 MHz - 924,5 MHz

Examples:

ADSN-CHW-C72-001-EU

- AdvanScan model 1
- 865,6 MHz - 867,6 MHz frequency band

ADSN-Zebra-RFD2000-TC20-EU

- AdvanScan model 3
- 865,6 MHz - 867,6 MHz frequency band

ADSN-TSL-1128-X001-US

- AdvanScan model 2
- 902,0 MHz - 928,0 MHz frequency band



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