



## Waterproof rugged industrial tablet Senter ST927 NFC + GPS + 2D NLS-EM3096

<b>Category:</b>	UMPC - Ruggedized
<b>Manufacturer:</b>	Senter
<b>Operating System:</b>	Android 7.1
<b>Display:</b>	8" (1280x800px)
<b>Brightness:</b>	~280Nit
<b>Processor:</b>	Qualcomm Snapdragon 625 MSM8953 (8x 2GHz)
<b>Memory:</b>	4GB
<b>Hard Drive:</b>	-----
<b>Flash Memory:</b>	64GB EMMC
<b>Touch screen:</b>	Capacitive
<b>Durability:</b>	IP67
<b>Drop:</b>	1.2m (MIL-STD 810)
<b>Shock:</b>	MIL-STD 810
<b>Vibration:</b>	MIL-STD 810
<b>Temperature:</b>	Operating temperature: -10°C -- 50°C Storage temperature: -40°C -- 60°C
<b>Humidity:</b>	5% -- 95%
<b>1D barcode scanner (reader):</b>	Symbol SE4750 (CMOS)
<b>2D barcode scanner (reader):</b>	Symbol SE4750 (CMOS)

<b>RFID scanner (reader):</b>	RFID HF: Support NFC/NXP,13.56MHZ ISO14443A,B and ISO15693 protocol, Reading distance 0-3cm
<b>Other:</b>	Sensors: gravity sensor, e-compass, acceleration sensor, light and distance sensor
<b>Battery:</b>	3.8V 10000mAh Lithium
<b>Working time on battery:</b>	8h
<b>Fast battery replacement ability:</b>	No
<b>HotSwap battery:</b>	No
<b>LAN:</b>	No
<b>WLAN:</b>	IEEE 802.11 a/b/g/n/ac
<b>Bluetooth:</b>	Bluetooth 4.0
<b>WAN:</b>	4G: FDD-LTE/TDD-LTE3G/2G: GSM, WCDMA, TD-SCDMA
<b>GPS:</b>	Yes
<b>Camera:</b>	Rear: 13Mpx, FlashFront: 5Mpx
<b>In/Out:</b>	Audio Jack   Charging port   HDMI   Micro USB (OTG - support RS232/422 i RJ-45)
<b>Optional accessories:</b>	-----
<b>Docking station connector:</b>	Yes
<b>VESA standard – holders and mounts support:</b>	No
<b>COM port:</b>	No
<b>Magnetic card reader (MSR):</b>	No
<b>Microchip card reader:</b>	No
<b>Contrast:</b>	-----
<b>Graphics card:</b>	Qualcomm® Adreno™ 506 GPU, 650Mhz
<b>Chipset:</b>	-----
<b>BIOS:</b>	-----
<b>Casing material:</b>	-----
<b>Flash Card Reader:</b>	micro SD (max. 128GB)
<b>CD/DVD:</b>	-----

<b>Audio:</b>	Built-in microphone and speaker
<b>Keyboard:</b>	Onscreen
<b>Additional Navigation Devices :</b>	-----
<b>Color:</b>	Orange
<b>Swivel Hinge:</b>	-----
<b>VGA out:</b>	No
<b>TV Out:</b>	-----
<b>TV Tuner:</b>	No
<b>Security:</b>	MIL-STD 810
<b>Waterproof:</b>	IPX7
<b>Sand and dust:</b>	IP6X
<b>Size:</b>	232 x 158 x 22mm - 810g
<b>Fanless casing:</b>	Yes

**Product from the Archive - production finished**



## SPECIFICATION

## RESISTANCE

## DATA COLLECTING

## WIRELESS COMMUNICATION

## APPLICATION

## AVAILABLE VERSIONS AND ACCESSORIES

Senter ST927 is a modern, waterproof industrial tablet designed for extreme applications. It has a specially designed, reinforced construction that meets the requirements of IP67, which confirms the protection of the device against dust and water. Like the military equipment, the tablet has the MIL-STD 810 military standard.

## SPECIFICATION

Senter ST927	
Processor	Qualcomm Snapdragon 625 (8x 2GHz)
Graphics	N/A
Operating system	Android 7.1
RAM	4GB
ROM	64GB
Display	8"   (800 x 1280)   (1200 x 1920) *
Touch screen	Capacitive

Senter ST927	
Battery	3.8V/10000mAh
Camera	5Mpx Front   13Mpx Rear
Protection	IP67   MIL-STD 810
Communication	2G/3G/4G   Bluetooth   NFC *   Wi-Fi   GPS
Connectors	Audio Jack   Charging port   HDMI Micro USB (OTG - support RS232/422 and RJ-45)
Memory card	Micro SD (max. 128GB)
SIM card	Micro SIM
RFID Reader *	NFC/RFID 13.56MHz   RFID LF   RFID UHF
1D Scanner *	Honeywell N4313   Zebra EM1350
2D Scanner *	Newland EM3096   Honeywell N3680   Motorola SE4750

\*

Optional equipment, available on specific versions only.



Detailed specification of the device is available in the tab "Technical data".

Dustproof industrial tablet Senter ST927 was equipped with high performance, energy-efficient Qualcomm Snapdragon 625 processor. Inside, there are eight cores that allow for more efficient processing of multiple tasks simultaneously. Shared caching, which uses a multi-level hierarchy, is dynamically allocated to each processor core according to the load. This reduces the average access time to main memory. Enhanced graphics card technology lets you enjoy full HD video and movies. Low power consumption guarantees long battery life.

## Ergonomic design



Senter ST927 industrial tablet is designed for resistance and convenience. The sleek and rugged 22mm thick design and stylish case will make the tablet very well suited for industrial use and more. The unique size has been carefully thought out to make the device more comfortable and ergonomic. The non-slip casing makes it safe and secure to hold it in your hand, and the rubber corners further protect your device against possible damage as a result of falls.

<b>Dimensions</b>	232 x 158 x 22mm
<b>Net weight</b>	810g

## Capacitive screen



With the capacitive screen, the reaction of the device is not to directly press the screen, but to change the electrostatic field at the point where the device is touched. This allows for much more precise handling and gentle brushes on the screen. In addition, we can use multitouch technology, the ability to control our tablet or the collector with a few fingers at once.

## RESISTANCE



### IP67 Protection

The IP standard defines the degree of protection provided by the enclosure of an electrical device against such factors as: access to dangerous parts inside the enclosure, penetration of foreign matter, splashing or immersion.

<b>IP6X</b>	No ingress of dust, complete protection against contact. A vacuum must be applied. Test duration of up to 8 hours based on air flow.
<b>IPX7</b>	Ingress of water in harmful quantity shall not be possible when the enclosure is immersed in water under defined conditions of pressure and time (up to 1 m of submersion).

### MIL-STD 810 Standard

The MIL-STD-810 is a strict military standard used in the United States Army. It determines the immunity of the equipment to severe environmental and weather conditions such as extreme low and high temperatures, temperature

changes, rain or dust, as well as various accidents (shocks, floods, high altitude falls, etc.). Although the MIL-STD-810 is mainly used for military equipment, it is often used by private companies that produce equipment that requires unmatched durability.



#### 1.2m drop resistance

Specially designed construction gives the machine a chance of accidental falls from up to 1.2 meters in operating mode, even on hard surfaces. In addition, the tablet screen is protected by specially tempered glass Gorilla Glass.

#### Extreme temperatures

Senter ST927 is suitable for continuous operation in both low and high temperatures in the range of  $-10^{\circ}\text{C}$  to  $50^{\circ}\text{C}$ . When the device is off, it can handle temperatures ranging from  $-40^{\circ}\text{C}$  to  $60^{\circ}\text{C}$ . In addition, the rugged industrial tablet performs well in rooms with increased humidity, ensuring proper operation even with 95% relative humidity.

<b>Working Temp.</b>	$-10^{\circ}\text{C}$ to $50^{\circ}\text{C}$
<b>Storage Temp.</b>	$-40^{\circ}\text{C}$ do $60^{\circ}\text{C}$

**Humidity**

5% do 95%

## DATA COLLECTING

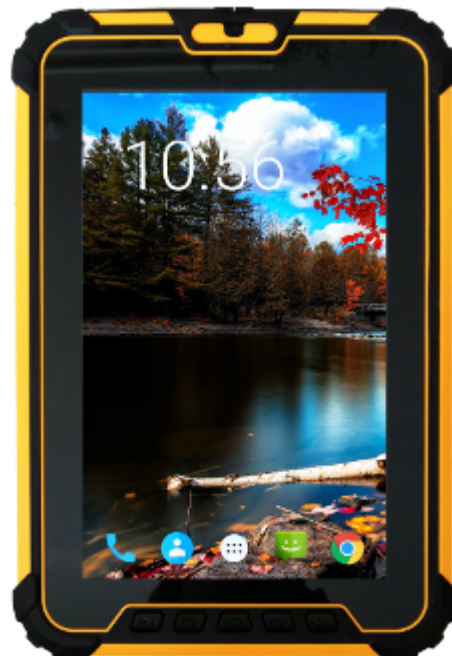
### NFC (option)

Short-range communication, known as NFC, is a radio communication standard that allows for wireless data exchange at a distance of a few centimeters. This technology is a simple extension of the proximity card standard that combines smart card interface and reader in one device. NFC devices can communicate with existing equipment in the standard ISO / IEC 14443 (cards and readers) as well as with other NFC devices, and thus are compatible with existing and already used public transport and payment infrastructures such as MIFARE.

### *NFC 13.56MHz*

*Support protocols ISO14443A,  
ISO14443B, ISO15693, MIFARE  
Classic*

*Read distance 3cm*



### RFID Reader (option)

RFID is a technology used to identify objects and to control the flow products. Reading of information from the special tags that are attached to objects (but not only, because RFID is also applicable to the identification of the animals and even humans) followed by radio. Depending on the type of tag changes the amount of information that can hold as well as the maximum distance at which data can be read. RFID tags, is an alternative to bar codes - more comfortable and more efficient.

<b>RFID LF (option)</b>	<p><u>Option 1:</u> 134.2KHz (FDX), read distance up to 3cm Support ISO11784/5, IC cards</p> <p><u>Option 2:</u> 134.2KHz (FDX), read distance up to 10cm Support ISO11784/5, IC cards</p> <p><u>Option 3:</u> 125KHz, support ID cards</p>
<b>RFID UHF (option)</b>	<p>Built-in ceramic antenna Support EPC C1 GEN2/ISO 18000-6C protocol Read distance up to 1m</p>

Barcode scanner (option)



**1D Barcode Scanners**

- Honeywell N4313 (Laser)*
- Zebra EM1350 (Laser)*



**2D Barcode Scanners**

- Newland EM3096 (CMOS)*
- Honeywell N3680 (CMOS)*
- Motorola SE4750 (CMOS)*

Barcode Reader allows you to read, decode and transfer stored data in barcode to your computer. Thanks to dynamic scanning method and the large range of reading, data collector is capable to carefully collecting data, which helps to increase the rate and efficiency of work. Simplified installation procedure, convenient and intuitive design allow to start scanner work very easy and quickly.

## WIRELESS COMMUNICATION

### 4G Module

4G technology is based on a radio network with fast transmission and the rare occurrence of downtime or transfer errors. The main distinguishing feature of the 4G from its predecessor (3G) is the speed of transfer between devices. The fourth generation network offers 100 Mb / s of mobile internet speed and 25 Mb / s of packet transfer. Technology enables users, including: extremely fast radio networks, Internet access, personalized telephony, and access to modern media and games services.

<b>4G Module</b>	<p><u>FDD-LTE</u>: B1/B3/B5/B7/B8 2100/1800/850/2600/900</p> <p><u>TDD-LTE</u> :</p> <p>Band38:2570 MHz - 2620 MHz,</p> <p>Band39: 1880 MHz - 1920 MHz,</p> <p>B41: 2555-2655MHz,</p> <p>B40: 2300-2400MHz, B38/B39/B41/B40/B38/B39/B40/B41</p>
<b>3G Module</b>	<p><u>GSM</u>: 850/900/1800/1900 B5/B8/B3/B2</p> <p><u>WCDMA</u>: B1/B2/B4 2100/1900/1700</p> <p><u>TD-SCDMA</u>: B34/B39</p>

## GPS Navigation

Waterproof industrial tablet Senter ST927 is equipped with a professional GPS module with Beidou and GLONASS support, combining low power consumption with high accuracy. Navigation is fast and smooth, allowing you to easily and easily reach any destination.

## Bluetooth 4.0

Bluetooth enables wireless short-range communication between various electronic devices, such as the keyboard, computer, laptop, palmtop, mobile phone and many others. In the fourth version of this standard, energy consumption was reduced considerably, at the expense of lower transfer costs, and real operating coverage increased.

## Wi-Fi network

Dual-band Wi-Fi provides fast network access wherever you can connect to secured or open Wi-Fi networks. This is a convenient solution for people who have a work or residence router and a wireless network that can be used at no extra cost. The shock-resistant industrial tablet, the Emode I18H, is equipped with the latest 802.11n technology, which allows file transfer speeds up to 150 Mb/s.

<b>Standards</b>	802.11(a/b/g/n)
<b>Frequencies</b>	2.4G + 5.8G (Dual-Band)

## APPLICATION

### Trade and Services

Thanks to their size and light weight, tablet and smartphone data collectors are a useful tool for sales representatives. Today's applications running under the collector system enable even entering the data collector's contractor database, which allows us to later search for it quickly by name or NIP number. We can do the same with our commodity base, which can work in parallel with the database of contractors. Additional use of collectors in the trade, such as sending orders or invoices directly to the company through the GSM network or Wi-Fi.



### Industry and Construction

Industrial tablets and data collectors are characterized by high resistance to adverse working conditions. Tightness, dust and water resistance of enclosures, certified by IP (dust and water resistance standards) and often MIL-STD military standard, can withstand even the harshest conditions in industrial infrastructure or on the construction site. With appropriate applications, collectors can be used for control and control of various industrial processes, as well as for data collection and analysis.



## Warehouse

An industrial data sheet is the ideal solution for quick stocktaking. In addition, depending on the software used, it streamlines the process of entering and delivering goods into the warehouse, enables price control and dispensing, helps to collect and order orders, and identifies customers and servicing the rental. The advantages of using data collectors are undoubtedly: time savings, customer satisfaction thanks to the correct price and speed of operation.



## AVAILABLE VERSIONS AND ACCESSORIES

The industry-leading Senter ST927 tablet is available in several versions to suit different needs. By clicking on the hardware configuration number you

will be redirected to the product with the parameters given in the table below.  
In addition, on request, you can create a configuration not currently available  
in the offer.

v.1

v.2

v.3

v.4

v.5

v.6

v.7

v.8

v.9

v.10

FHD Resolution	—	—	—	—	—	—	—	—	—
1D Honeywell	—	—	—	—	—	—	—	—	—
1D Zebra	—	—	—	—	—	—	—	—	—
2D Newland	—	—	—	—	—	—	—	—	—
2D Honeywell	—	—	—	—	—	—	—	—	—
2D Zebra	—	—	—	—	—	—	—	—	—
NFC/RFID HF									—
LF 134KHz 3cm	—	—	—	—	—	—	—	—	—
LF 134KHz 10cm	—	—	—	—	—	—	—	—	—
LF 125KHz	—	—	—	—	—	—	—	—	—
UHF RFID	—	—	—	—	—	—	—	—	—
Infrared meter reading	—	—	—	—	—	—	—	—	—

[v.11](#) [v.12](#) [v.13](#) [v.14](#) [v.15](#) [v.16](#) [v.17](#) [v.18](#) [v.19](#) [v.20](#)

FHD Resolution	—	—	—	—	—	—	—	—	—
1D Honeywell	—	—	—	—	—	—	—	—	—
1D Zebra	—	—	—	—	—	—	—	—	—
2D Newland	—	—	—	—	—	—	—	—	—
2D Honeywell	—	—	—	—	—	—	—	—	—
2D Zebra	—	—	—	—	—	—	—	—	—
NFC/RFID HF	—	—	—	—	—	—	—	—	—
LF 134KHz 3cm	—	—	—	—	—	—	—	—	—
LF 134KHz 10cm	—	—	—	—	—	—	—	—	—
LF 125KHz	—	—	—	—	—	—	—	—	—
UHF RFID	—	—	—	—	—	—	—	—	—
Infrared meter reading	—	—	—	—	—	—	—	—	—

v.21

v.22

v.23

v.24

v.25

v.26

FHD Resolution	—	—	—	—	—	—
1D Honeywell	—	—	—	—	—	—
1D Zebra	—	—	—	—	—	—
2D Newland			—	—	—	—
2D Honeywell	—	—	—	—	—	—
2D Zebra	—	—				
NFC/RFID HF	—		—	—	—	
LF 134KHz 3cm	—	—			—	—
LF 134KHz 10cm	—	—	—	—	—	—
LF 125KHz		—	—	—		—
UHF RFID	—		—	—	—	
Infrared meter reading	—	—	—	—	—	—

We also offer a number of extra accessories for this tablet to further enhance its functionality and comfort. Below is a list of available accessories. Click on the "Check" link to go to the description page and the price of the accessory.

Wrist grip



The wrist strap increases the comfort and security of your tablet while you work long hours.

[Check](#)

### USB OTG Cable



The OTG cable allows you to connect some peripherals such as a mouse, a pen drive, or a keyboard.

[Check](#)

### USB - RJ45 Adapter



Allows you to connect the tablet to a wired network using a standard LAN cable.

[Check](#)

## Earphones



Standard, wired earphones with 3.5mm audio jack (minijack) connector.

[Check](#)

## Bag



Comfortable carrying bag with shoulder strap, effectively protects the device.

[Check](#)

### Car charger



Enables you to charge your device in a car with a built-in cigarette lighter.

[Check](#)



More pictures available in the "Gallery" tab.