

Rugged Computing Tablet

W109NS



Portable Carry

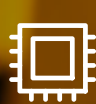
- Handheld, Standing, Shoulder Carry



Win11



WiFi-6



CPU



GPS



Camera



Fingerprint
Unlock



NFC
ODM



Interface
ODM



ID
ODM



1D/2D
ODM



5G net
ODM



Storage

- 8+128GB/16+256GB, removable M.2 SSD (2242), up to 2TB available



Fingerprint Unlock

- Fingerprint recognition with millisecond-level response times, ensuring the security of corporate data



System

- Windows 11 (Standard) Optional: Windows 10



Battery Life

- 11.4V 8300mAh high-voltage lithium-ion battery, removable, battery life $\geq$ 8 hours



Configuration

- Intel® Processor N150, 4 cores, 4 threads, 6M cache



Heat dissipation

- Stealth Ice Wings, Multi-dimensional Heat Dissipation Design





Product form	
Size /weight	Unit only: 307.5 × 211.1 × 27.7 mm / 1565.4 g (1739.2 g with handle) With packaging and accessories: 409 × 240 × 60 mm / 2634.7 g
Wall hole pitch / screw	258.5x177.5mm/ M4.5*4.5mm
Color	Black , color customizable
Screen size	10.95 inch , 16:10
Resolution	1920 × 1200, customizable to 2.5K (2560 × 1600)
Screen brightness	700 cd/m² Customizable to 1000 cd/m²
Tp touch screen	10-point touch G+FF Corning Gorilla Glass, hardness 7H
Main battery	11.4V 8300mAh high-voltage lithium-ion battery, removable, battery life ≥ 8 hours (1080p + 50% brightness), hot-swappable (customizable)
camera	Front camera: 5MP fixed focus Rear camera: 8MP auto focus,Supports flash
Buttons	Power button*1 , Volume keys*2 (Vol+ , Vol-) Custom keys*2 (P key, F key)

Data collection	
1D/2D scanner (Customized)	N4680 300,000 pixels + depth of field; Code 39, 5 mil, 50 – 173 mm + red light Supported barcode formats: 2D: Codablock A, Codablock F, PDF417, MicroPDF417, Aztec Code, Data Matrix, Maxi-Code, QR Code, Chinese Sensible, Grid Matrix, Dot Code 1D: Codabar, Code 11, Code 128, Code 2 of 5, Code 39, Code 93 and 93i, EAN/JAN-13, EAN/JAN-8, IATA Code 2 of 5, Interleaved 2 of 5, Matrix 2 of 5, MSI, GS1 Databar, UPC-A, UPC-E, UPC-A/EAN-13 with extension, Coupon Code, GS1 Coupon Code 32 (PARAF), EAN-UCC Emulation, GS1 Databar (N1) 300,000 pixels + depth of field Code 39 5 mil 65 – 150 mm + red light Supported Barcode Formats: 2D: PDF417, QR Code, Micro QR, Data Matrix 1D: Code 128, EAN-13, EAN-8, Code 39, UPC-A, UPC-E, Codabar, Interleaved 2 of 5, ITF-6, ITF-14, ISBN, ISSN, Code 93, UC-C/EAN-128, GS1 Databar, Matrix 2 of 5, Code 11, Industrial 2 of 5, Standard 2 of 5, AIM128, Plessey, MSI-Plessey
NFC (Customized)	Supports 13.56 MHz protocols including 14443A/14443B/15693
UHF (Customized)	3 options available: Within 2 meters, operating frequency 840 – 960 MHz Within 5 meters, operating frequency 860 – 960 MHz Within 15 meters, operating frequency 840 – 960 MHz
ID Card (Customized)	ID Card Reader Module
Fingerprint (Customized)	1: Ordinary industrial fingerprint 2: Fingerprint certified by the Ministry of Public Security 3: FBI certified fingerprint
Fingerprint Login (Standard)	SPI interface

Other	
Adapter	19V/3.42A , DC interface adapter
Optional accessories	Battery charging dock ; Car charger

Explosion-proof information	
Explosion-proof version (optional)	EX Class II Petrochemical Explosion-Proof, KA Class I Mining Safety Explosion-Proof, MA Class I Coal Mine Safety Explosion-Proof

Product reliability	
Drop height	Meets the requirements of (GJB 150.18A-2009, GJB 150.1A-2009) and (MIL-STD-810H) for the 1.22-meter drop test
Working temperature	-20℃~60℃
Storage temperature	-30℃~70℃
Humidity	Humidity: 95% Non-Condensing
Certificates	IP67, 3C, CE, US military standard-810H certification,energy saving certification, ISO quality certification system, ROHS, three-proof salt spray test

Hardware configuration	
Speaker, microphone	(speaker 2W/4Ω)*2 , MIC*1
CPU	Intel® Processor N150, 4 cores, 4 threads, 6M cache, Turbo Boost up to 3.60 GHz
RAM/ROM	8+128G/16+256G, M.2 SSD (2242) Removable, up to 2TB available
TPM	Built-in TPM security chip
Gravity sensing	OK

System	
System	OS::Win11 Opt: Win10

Wireless connection	
WIFI	WIFI 802.11 (a/b/g/n/ac/ax) WIFI6
Bluetooth	BT 5.2 (BLE) class1 transmit distance:10m
3G/4G (Customised)	LTE-FDD : B1/2/3/4/5/7/8/12/13/14/18/19/20/25/26/28/66/71 LTE-TDD : B38/39/40/41 WCDMA: B1/2/4/5/6/8/19
5G (Customized)	Region:EMEA,Australia,Japan,Korea 5G SA&NSA: N1/N3/N5/N7/N8/N20/N28/N38/N40/N41/N71/N77/N78/N79 LTE-FDD:B1/B3/B5/B7/B8/B18/B19/B20/B28/B32 LTE-TDD:B34/B38/B39/B40/B41/B42 WCDMA:B1/B5/B8 Region:China 5G SA&NSA: N1/N28/N41/N78/N79 LTE-FDD:B1/B3/B5/B8/B28 LTE-TDD:B34/B38/B39/B40/B41 WCDMA:B1/B8 Region: North America 5G NR : N2/N5/N7/N12/N13/N14/N25/N38/N41/N48/N66/N71/N77/N78 LTE-FDD:B2/B4/B5/B7/B12/B13/B14/B17/B25/B26/B66/B71 LTE-TDD:B38/B41/B42/B43/B48 WCDMA:B2/B4/B5
Positioning	GPS, Beidou, Galileo, GLONASS , Optional Single-System BeiDou Positioning

Ports	
Type -C	*1 USB 3.0, Supports PD charging
Type -A	*1 , Type-A USB.3.0
Type -A	*1 , Type-A USB.2.0
DB9	*1, RS232 (optional 232/422/485 protocol)
Earphone Jack	*1 , 3.5mm Standard Earpiece jack
TF Card	*1 , Maximum support 256GB expansion
SIM Card	*1 , Micro SIM card slot
micro HDMI	*1
DC jack	*1 , 19V/3.42A 5.5mm 2.1mm
POGO pin	*1 ,12Pin USB+Charge
RJ45 jack	*1 , 100/1000M
keyhole	*1 , keyhole
Stylus	*1 , Stylus
Extension	Pre-wired Aviator Ports: Power In, USB 2.0, COM
Integration capability	High Extensibility: Modular Design: Capable of integrating custom client modules. Customizable I/O: Supports tailored functional interfaces. Pre-wired Mainboard: Reserved internal signals and connectors (SATA, PCIe, 3x USB 2.0).

Product Highlights

01



Powerful processor

N150
4-core, 4-thread

Equipped with the all-new Intel® N150 high-performance processor, featuring a 4-core, 4-thread standard computing architecture and a built-in 6MB high-capacity intelligent cache, with a maximum single-core Turbo Boost frequency of up to 3.60GHz, it balances powerful computing performance with low power consumption. It enables smoother parallel multi-tasking and can reliably run industrial configuration software, surveying and data collection programs, multi-window reports, and remote monitoring systems. The 6MB cache significantly reduces file loading and data read latency, allowing you to open large drawings and batch inspection data without lag. Enjoy a seamless office experience.

02



Multiple portable modes

Standing, handheld, shoulder-carried

Compatible with professional back mounts, featuring a 180 ° adjustable aperture for versatile positioning. Enables upright support, handheld operation, and other portable carrying methods. Multiple threaded holes are integrated across the rear, top, and bottom surfaces, facilitating attachment to shoulder straps, back straps, vehicle mounts, enabling diverse carrying and securing methods such as back-carrying, cross-body, or hand-carrying. This accommodates various operational scenarios including ground inspections, elevated work, and fixed production line monitoring, providing robust equipment support to accelerate workflow progress. It prevents accidental slippage during operations and reduces the carrying burden on personnel.

03



Removable battery

8300mAh

Equipped with an 11.4V 8300mAh high-voltage removable lithium-ion battery, it delivers stable high-voltage power output with lower energy loss. Under standard operating conditions (1080P resolution, 50% screen brightness), it provides a continuous runtime of ≥8 hours, meeting the demands of all-day, single-shift operations for power line inspections, mining exploration, and chemical fieldwork. The battery features a quick-release latch mechanism, allowing for rapid removal, installation, and replacement by hand; it supports a customizable hot-swap function, and when paired with a built-in backup battery, the device remains powered on throughout the entire process of replacing the main battery.

04



ROM/RAM No bottleneck

8+128G
16+256G

Flexible dual-tier memory configurations offer two base options—8+128GB and 16+256GB—to meet the needs of various industries, including basic office tasks, large-scale surveying software, and simultaneous operation of multiple programs. The device is equipped with a standard M.2 2242 removable SSD, which users can install and replace on their own, making storage expansion simple and convenient. Storage capacity can be expanded up to 2TB, allowing for the local storage of massive amounts of inspection drawings, monitoring videos, engineering data, and back-end databases—eliminating the need for frequent use of external storage devices.

Interface



Usage Scenarios



Accessories

