

# Shenzhen Genstar Technology Co., Ltd.

## Model: G1 Series

# specification



Photo Statement: The photo was taken of products from a specific batch manufactured by our company. Due to ongoing maintenance, the actual shipped products may differ from those shown in the photo.

version number	date of issue
V1.3	2025/12/20

Thank you for choosing our products. Please read this manual carefully before use.

## Product Usage Precautions

- **This equipment must be installed, disassembled, and maintained by technically trained personnel.**
- **Before powering on, carefully verify that the electrical parameters of the power supply equipment match those specified on the rear casing label of this product; otherwise, do not power on.**
- **Ensure that products with a supply voltage higher than the safe voltage are installed or placed in locations inaccessible to children or where adequate protective measures are in place.**
- **Unplug the power cord and store it in a safe, designated location during thunderstorms or lightning, when the interior is unoccupied, or after prolonged disuse.**
- **Check and ensure that the ground wire of the AC power cord is properly connected, while protecting the power cord from physical or mechanical damage.**
- **During cleaning, ensure the entire unit is powered off and unplug the power socket.**
- **During installation, avoid harsh conditions such as damp environments, direct sunlight, high-temperature sources, heavy cooking fumes, or strong wind and sand.**
- **Do not place the antenna inside a metal enclosure or similar shielding equipment to prevent network disconnections or instability.**
- **Do not place heavy objects on the device to avoid excessive pressure, which may damage the equipment and prevent it from functioning properly.**
- **Avoid using in vehicles or environments with significant vibrations to prevent poor interface contact.**
- **Private disassembly and repair without permission is strictly prohibited.**

## Product Presentation

The Genstar G1 is a touch-based cash register terminal that combines high performance with exceptional scalability, specifically designed for modern business environments that prioritize efficient management and flexible deployment. Featuring a modular industrial design, it offers the flexibility to choose between single-screen or dual-screen configurations. The dual-screen model significantly enhances customer interaction, ensuring a more transparent shopping experience and smoother communication.

### **Flexible configuration to meet changing needs**

The device offers multiple screen sizes to accommodate various store spaces and operational needs. At the system level, it supports dual operating systems—Android and Windows—with seamless compatibility with mainstream cash register software and proprietary systems, providing businesses extensive deployment flexibility.

### **Payment and identification, covering all scenarios**

To meet the demands of omnichannel payment and identity verification, G1 has incorporated a comprehensive suite of functional extension modules:

**Visual Recognition:** Supports cameras of various specifications and integrates with facial recognition algorithms, enabling seamless facial payment or member identification.

**Non-contact authentication:** The system can be optionally equipped with a magnetic stripe card reader, an NFC card reader module, and an ID card verification module, enabling seamless processing for bank cards, membership cards, or ID card authentication—all within a single device.

**Convenient scanning:** Built-in 1D/2D scanning module for quick scanning of product barcodes and payment QR codes.

**Printer:** Features built-in 58mm/80mm thermal printers that print receipts without external devices, keeping your work surface tidy.

Additionally, the device supports an optional 4G communication module, ensuring stable connectivity across various network environments. This truly enables "multi-functional functionality in a single device," making it suitable for scenarios such as convenience stores and cafeterias.

### **Enrich the interface for seamless expansion**

The device features a comprehensive range of I/O interfaces, enabling seamless integration with peripheral devices such as cash registers, electronic scales, and label printers, thereby meeting the complex operational

requirements of various industries including restaurants, supermarkets, hotels, and government service counters.



# ◆ Product Display



Single Screen 15.6"



Single Screen 15.6"  
● Built-in 58mm Printer



Dual screen  
● Main screen 15.6" sub screen 15.6"  
● Built-in 80MM printer



Dual Screen  
● Main screen 15.6" sub screen 13.3"  
● Built-in 58MM printer



**Dual Screen**

- main screen 15.6" sub screen 15.6"
- Dual touch face scan payment



**Dual Screen**

- main screen 15.6" sub screen 13.3"
- built-in IC/ID/NFC/MSR card reader
- built-in QR code reader



**Single Screen 15"**

- Built-in 80MM printer



**Dual Screen**

- Main screen 15" sub screen 15"
- Built-in 80MM printer

# Custom product appearance

We can do more than imagine...



Portrait Screen 15.6"



Portrait screen dual screen 15.6" + 15.6"  
• Built-in 80MM printer



Single screen 15.6"  
• Built-in IC/ID/NFC/MSR card reader



Single screen 15.6"  
• Built-in VFD module

## Product Core Parameters

Android system	RK3568	RK3576	RK3588
<b>CPU</b>	Rockchip RK3568 quad-core 64-bit processor with Cortex-A55 architecture, featuring a maximum clock speed of 2.0GHz	Rockchip RK3576 quad-core Cortex-A72 + quad-core Cortex-A53, with a maximum frequency of 2.2GHz	The Rockchip RK3588S is an octa-core 64-bit processor with a maximum clock speed of 2.4GHz, featuring a quad-core Cortex-A76 (large core) and quad-core Cortex-A55 (small core) architecture.
<b>GPU</b>	ARM G52 2EE Supports OpenGL ES 1.1/2.0/3.2, OpenCL 2.0, and Vulkan 1.1 Embedded high-performance 2D acceleration hardware	ARM G52 MC3 Supports OpenGL ES 1.1/2.0/3.2, OpenCL 2.0, and Vulkan 1.1. Embedded high-performance 2D acceleration hardware	ARM G610 GPU MC4 quad-core GPU Supports OpenGL ES3.2, OpenVG1.1, and OpenCL2.2, with 450 GFLOPS Embedded high-performance 2D acceleration hardware
<b>NPU</b>	Equipped with a built-in neural network processor (NPU) delivering 0.8TOPS@INT8 performance, it supports AI development tools including Caffe/Mxnet/TensorFlow/TF Lite/ONNX/Darknet for model deployment. Features rapid model conversion capabilities.	Equipped with a built-in neural network processor (NPU) delivering 6.0TOPS@INT8 performance, it supports models including Caffe, Mxnet, TensorFlow, PyTorch, TF Lite, ONNX, and Darknet, providing comprehensive AI development tools with rapid model conversion capabilities.	Equipped with a built-in neural network processor (NPU) for powerful AI computing: Supports IN4/IN8/INT16/FP16 operations with up to 6.0 TOPS performance, enabling direct loading of models like Caffe/Mxnet/TensorFlow/TF Lite/ONNX/Darknet. Provides AI development tools including rapid model conversion capabilities.
<b>Operating System</b>	Android 11	Android 14	Android 12
<b>RAM</b>	LPDDR4 2GB (4G/8G optional)	LPDDR4 4GB (8G/16G optional)	LPDDR4 4GB (8G/16G/32G optional)
<b>ROM</b>	eMMC 16GB (available in 32G, 64G, 128G, or 256G options)	eMMC 32GB (available in 64G, 128G, 256G, or 512G options)	eMMC 32GB (64G/128G/256G optional) TF Card expansion (optional)
<b>Ethernet</b>	Supports Ethernet 10/100	Supports Ethernet 10/100/1000 speeds	Supports Ethernet 10/100/1000 speeds
<b>WiFi</b>	Supports 2.4GHz and Wi-Fi 802.11b/g/n/ac protocols. (Optional 5GHz dual-band Wi-Fi)	Supports 2.4GHz and Wi-Fi 802.11b/g/n/ax protocols (5GHz dual-band Wi-Fi optional)	Supports 2.4G Wi-Fi and Wi-Fi 802.11b/g/n protocols. (Optional 5GHz dual-band Wi-Fi)

<b>Bluetooth</b>	Supports Bluetooth function, V2.1+EDR (optional 3.0/3.0+HS/4.1/BLE)	Supports Bluetooth function, V2.1+EDR (optional 3.0/3.0+HS/4.1/BLE)	Supports Bluetooth function, V2.1+EDR (optional 3.0/3.0+HS/4.1/BLE)
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Windows system	J6412	N100	I5-10210U
<b>CPU</b>	Celeron J6412, quad-core quad-thread processor with a base frequency of 2.0GHz and a maximum frequency of 2.6GHz	N100, quad-core quad-thread, up to 3.4GHz	Intel Core i5-10210U, quad-core eight-thread, base frequency 1.6G, maximum 4.2G
<b>GPU</b>	Intel® UHD Graphics	Intel® UHD Graphics	Intel® Iris® Xe Graphics eligible
<b>Operating System</b>	Windows10/11	Windows10/11	Windows10/11
<b>RAM</b>	1× DDR4 memory slot with SO-DIMM 4GB capacity (4G/8G/16G available)	1× DDR4 memory slot with SO-DIMM 4GB capacity (available in 4G, 8G, or 16G variants)	2×DDR4 memory slots, supporting up to 64GB
<b>SSD</b>	64GB SSD (available in 128G, 256G, or 512G options)	64GB SSD (available in 128G, 256G, or 512G options)	64GB SSD (available in 128G, 256G, or 512G options)
<b>Ethernet</b>	Supports Ethernet 10/100/1000 speeds	Supports Ethernet 10/100/1000 speeds	Supports Ethernet 10/100/1000 speeds
<b>WiFi</b>	Supports 2.4GHz, IEEE 802.11b/g/n. (5GHz dual-band optional)	Supports 2.4GHz, IEEE 802.11b/g/n. (5GHz dual-band optional)	Supports 2.4GHz, IEEE 802.11b/g/n. (5GHz dual-band optional)
<b>Bluetooth</b>	None (Bluetooth optional: V2.1+EDR / 3.0/3.0+HS/4.2/5.2)	None (Bluetooth optional: V2.1+EDR / 3.0/3.0+HS/4.2/5.2)	None (Bluetooth optional: V2.1+EDR / 3.0/3.0+HS/4.2/5.2)

15.6-inch LCD screen			remarks
<b>LCD type</b>	TFT	TFT	
<b>LCD size</b>	15.6 inches	15.6 inches	
<b>Active Area(W×H)</b>	344.23 x 193.54 mm	344.16 x 193.59 mm	
<b>Number of Dots</b>	1366*768	1920*1080	

Brightness	220 Cd/m <sup>2</sup>	255~300 Cd/m <sup>2</sup>	
Viewing Angle(H) θ 3	45 degrees	85 degrees	
Viewing Angle(H) θ 9	45 degrees	85 degrees	
Viewing Angle(V) θ 12	20 degrees	85 degrees	
Viewing Angle(V) θ 6	40 degrees	85 degrees	
Contrast Ratio	400	1200	
Response Time	12 ms	20~25 ms	
Colour Gamut	45%	45%	

Touchscreen/Glass		remarks
structure	G+G	
Tempered glass thickness	1.1 mm	
Sensor thickness	0.7 mm	
Cover plate color	black	
surface hardness	>6H	
Number of contacts	10	
Touch area	Φ≥9	
input mode	Finger or conductive pen	
Total light transmittance	≥86%	
fog level	≤5%	

Printer	58mm	80mm	remarks
Print mode	Thermal-line dot method	Thermal-line dot method	
Print Speed	MAX:90mm/s	MAX:150mm/s	
Resolution	203dpi	203dpi	
Effective print area	48mm	72mm	
Paper type	Thermal paper roll	Thermal paper roll	
Paper width	57.5±0.5mm	79.5±0.5mm	
Max Paper Rolldiameter	max: 50mm	max: 80mm	
Paper Thickness	0.055-0.09mm	0.055-0.09mm	

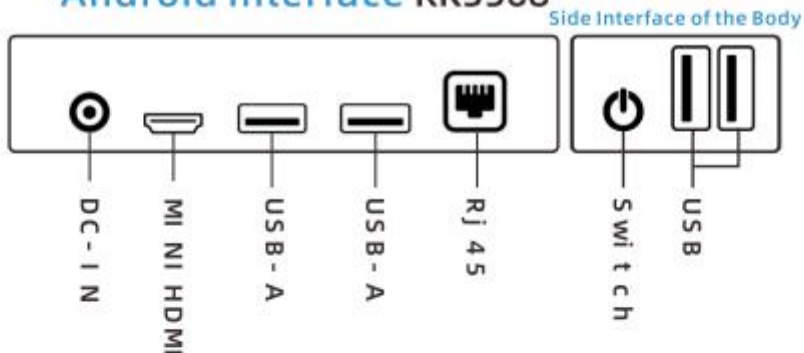
Print Life	≥100KM	≥100 KM	
Cutter	None	Auto cutter, full cut and half cut (via command)	
Cutter Life	/	≥1,000,000 occurrences	
Character Set	ASCII code, GBK, BIG5, etc.	ASCII code, GBK, BIG5, etc.	
Barcode	UPC-A, UPC-E, JAN/EAN8, JAN/EAN13, CODE39, ITF, CODEBAR, CODE128, CODE93	UPC-A, UPC-E, JAN/EAN8, JAN/EAN13, CODE39, ITF, CODEBAR, CODE128, CODE93	
QR code	QR code	QR code	

Loudspeaker		remarks
impedance	4Ω±15%	
power rating	3W	
maximum power	4W	

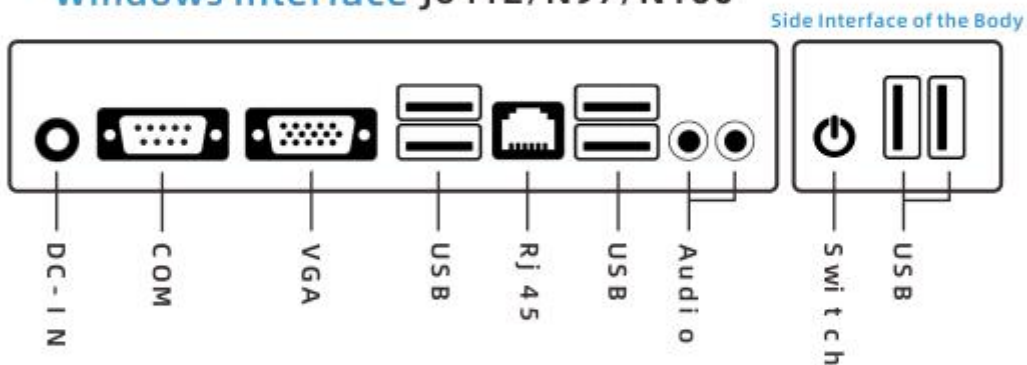
Product operating environment parameters	
Storage temperature and humidity	-20 ~ 70°C, 10 ~ 85 %RH
Working temperature and humidity	-20 ~ 50°C, 10 ~ 80 %RH
Electrostatic Discharge Immunity (ESD)	Contact voltage: ±6 kV; air voltage: ±8 kV
Power Input	DC12V

## Product appearance and interfaces:

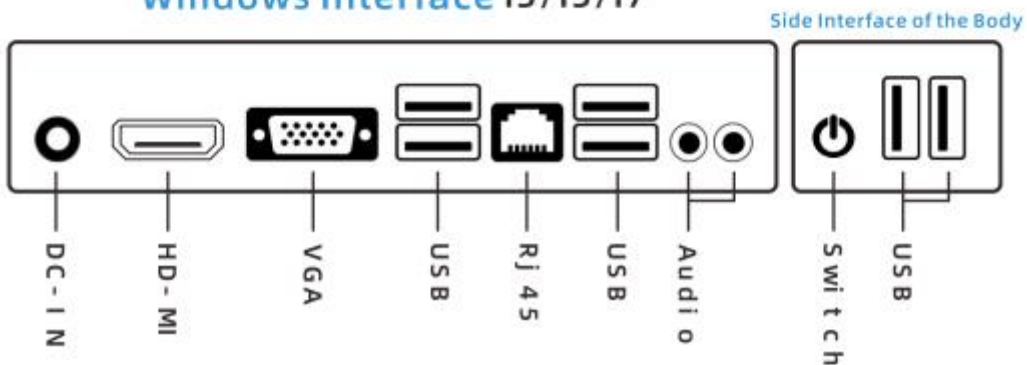
### Android Interface RK3568

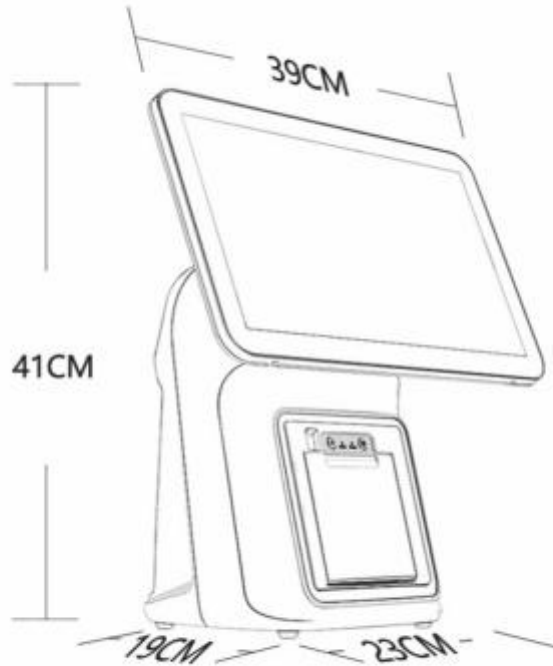


### Windows Interface J6412/N97/N100

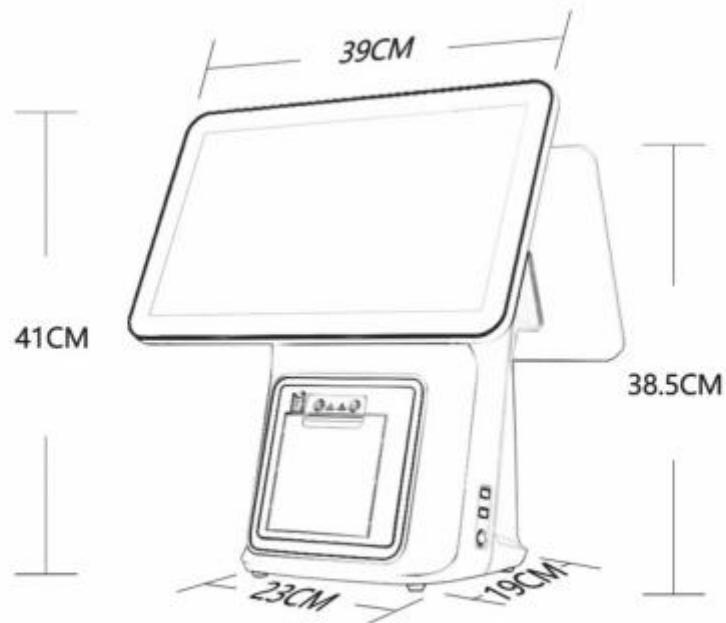


### Windows Interface I3/I5/I7





**G1 Single Screen 15.6寸 23\*19\*41CM**



**G1 Dual Screen 15.6"+13.3" 23\*19\*41CM**  
**Sub Screen Height: 38.5cm (15.6") 37.2cm (13.3")**