

S101NT-ALPR

10.1" Edge-AI Rugged Tablet with NVIDIA Jetson Orin Nano



KEY FEATURES

- Powered by NVIDIA® Jetson Orin™ Nano 8GB, delivering up to 50 TOPS of AI performance for real-time edge AI inference
- Integrates Winmate's ALPR application with external 3.1MP USB 3.0 global shutter camera
- Enables instant license plate recognition, whitelist/blacklist screening, and operator interaction directly on the 10.1-inch touch display
- Supports dual external USB cameras with a lockable Type-C connection for flexible camera positioning and reliable connectivity
- Features an IP65-rated and MIL-STD-810H compliant, with an 800-nit display and hot-swappable battery for demanding field environments

INTRODUCTION

The Winmate S101NT-ALPR is a 10.1-inch Edge AI Rugged Tablet designed for real-time Automatic License Plate Recognition (ALPR) and intelligent field operations. Powered by the NVIDIA® Jetson Orin™ Nano 8GB module with up to 50 TOPS of AI performance, it enables low-latency edge inference and fast visual processing. Its rugged design makes it well suited for law enforcement, parking management, mobile access control, and other demanding outdoor applications.

SPECIFICATIONS

Display			
Resolution	1920x1200	Size	10.1 inches
Contrast Ratio	800:1	Panel Brightness	800.0 nits
View Angles	85,85,85,85	Bonding	Optical Bonding for Sunlight Viewability
Type	Projected Capacitive Multi Touch	Viewability	Anti-Glare touch treatment
Touch Mode	Support Hand/Rain, Stylus, Glove Mode		
System Specification			
Processor	NVIDIA Jetson Orin Nano 8GB 10/15/20W (Three Mode)	Memory	8GB on Orin Nano SOM
Storage	128GB SSD (Default) 256GB SSD (Optional) 512GB SSD (Optional) 1TB SSD (Optional) 2TB SSD (Optional)	Security	Trusted Platform Module (TPM) 2.0 Kensington Lock
Operating System	Jetpack 6.2 Operating System	WLAN	Support
BT	Support	WWAN	4G (Optional) 5G (Optional)
GNSS	GPS, GLONASS	Sensors	Light sensor/ G-sensor / Gyro

Mechanical

Dimension	272 x 192 x 25mm	Weight	1.1 kg
Cooling System	Fan Design		

Environment

Operating Humidity	10% to 90% RH, non-condensing	Operating Temperature	-20°C to 60°C
Storage Temperature	-30°C to 70°C (-22°F to 158°F)	Shock	MIL-STD-810H Method 516.8 Procedure I
Vibration	MIL-STD-810H Method 514.8 Procedure I	IP rating	IP65
Drop	MIL-STD-810H Method 516.8 Procedure IV, 4 ft		

Certification

Certification	CE, FCC
---------------	---------

IO Ports

USB Port	1 x USB 3.0 (Type-C support Power Delivery 20V In) 1 x USB 3.0 (Type A) (when lockable I/O plate be removed)	SD Card Slot	1 x Micro SDXC slot
SIM Card Slot	1 x Nano SIM card slot	Audio	1 x Audio combo 3.5mm audio combo jack (Mic in or Line Out) (when lockable I/O plate be removed) Dual Mic Built-in Microphone Single Speaker
Expansion Port	1 x Expansion Connector for USB3.0 / UART (Optional)	LAN	1 x RJ45-10/100/1000 GigaLAN port
Indicator	2x LED Indicator for Power, Battery	Docking Connector	1 x 19-pin docking connector

Control

Button	1 x Power 2 x Programmable function Keys
--------	---

Barcode Scanner

Barcode Scanner	1D/2D Barcode Reader (Optional)
-----------------	---------------------------------

Camera

Front Camera	2MP Front Camera (Optional)	Rear Camera	8MP Rear Camera (Optional)
--------------	-----------------------------	-------------	----------------------------

Accessory

Accessory	Adapter and Power Cord Standard Battery	Optional Accessory	Vehicle Charger (Optional) Vehicle Dock (Optional) Desk Dock (Optional) Battery Charger (Optional) Hand Strap (Optional) Shoulder Strap (Optional) Carry Bag (Optional) Stylus (Optional)
-----------	--	--------------------	--

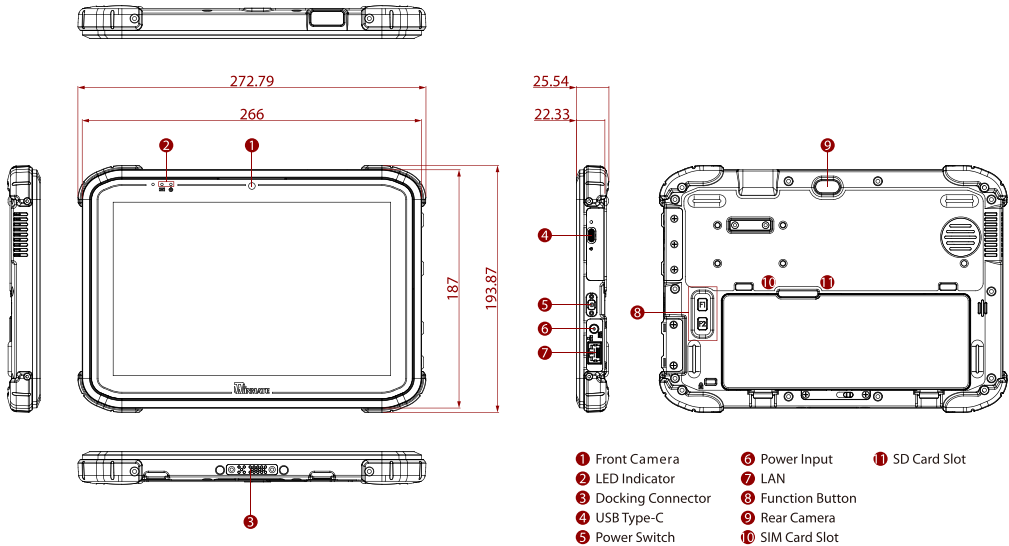
Power

Battery	Hot-swappable 11.4V, typ. 3500 mAh Li-Ion Re-chargeable Battery (3S1P) 11.4V, typ. 4750 mAh Li-Ion Re-chargeable Battery (3S1P) (Optional)	Power Rating	19V DC
Adapter	100-240V, 50-60Hz / 19V DC	Consumption	10/15/20W (Three Mode)

Edge AI Kit

Interface	Camera: USB3.0	Dimension	Camera: 51.1 x 39.5 x 29 mm
Resolution	Camera: 3M (2048x1536)	Shutter	Camera: Global Shutter
Accessory	1 x USB 3.0 Lockable Type-C cable	Winmate IoT Application	Automatic License Plate Recognition App

DIMENSIONS UNIT:MM



NOTE

1. This is a simplified drawing, and some components are not marked in detail.
 2. Please contact our sales representative if you need further product information.
 3. All specifications are subject to change without prior notice.
 4. The product shown in this datasheet is a standard model. For diagrams that contain customized or optional I/O, please contact the Winmate Sales Team for more information.
- * Some images or content on this page are created or enhanced using generative AI technology. All AI-generated content has been reviewed before publication.

