

# **Jetson Nano Fanless Aluminum Waterproof (IP67) Enclosure With 4 Port Gigabit PoE Switch Datasheet**



## Jetson Nano:

Note: Refer to Nvidia Jetson Nano documentation for details

## GPIO:

GPIO can be accommodated using the 40 Pin GPIO J41 on the Jetson Nano.

## 4 Port Unmanaged PoE Gigabit Switch (802.3af):





### Front Panel Connectors:

Connector	Type	Connector Rating	Notes
4 x RJ45	Circular	Waterproof Connector	Waterproof cable connection
Switch	Circular, Illuminated	Waterproof Switch	Default = Power Can connect as Reset
DC Power	Circular, 2 Pin, 10A	Waterproof Connector	Waterproof cable connection
WiFi External Antenna	2 x WiFi RP SMA	Waterproof Connector	Waterproof cable connection





### Rear Panel Connectors:

Connector	Type	Connector Rating	Notes
USB3 + USB3	Circular	Waterproof Connector	Non-Waterproof cable connection
RF, LTE WWAN	SMA	Waterproof Connector	Waterproof cable connection
GNSS, GPS	SMA	Waterproof Connector	Waterproof cable connection

## WiFi M.2 Module:

Note: Refer to Intel datasheet for Intel® Dual Band Wireless-AC 8265 Desktop Kit

<https://www.intel.com/content/dam/www/public/us/en/documents/product-briefs/wireless-ac-8265-desktop-kit-brief.pdf>

## WWAN LTE + GNSS/GPS:



Note1: Refer to Sierra Wireless datasheet for AirPrime EM74xx Global LTE + GPS Modules

Note2: Both LTE and GPS Antennas are available via external SMA connectors.

Note3: Combined LTE and GPS antenna supplied with 4m RF extension cables

Datasheet Link:

[https://www.sierrawireless.com/-/media/iot/pdf/datasheets/sierrawireless\\_airprime\\_em\\_series\\_datasheet.pdf](https://www.sierrawireless.com/-/media/iot/pdf/datasheets/sierrawireless_airprime_em_series_datasheet.pdf)

## Certification and Compliance

The Jetson Nano Fanless Waterproof Aluminum Enclosure uses all pre-certified components and is therefore EMC compliant. Compliance is formalized using the Self Certification Technical Construction Folder to support a “Self Declared” Declaration of Conformance.

The compliance status for each of the components used are specified in Table 1.

	Jetson Nano	WiFi	WWAN	PoE Switch	5V DC/DC Converter	48V DC/DC converter
UL	Y	Y	Y	Y	Y	Y
IEC	Y	Y	Y	Y	Y	Y
ACMA, RSM	Y	Y	Y	Y	Y	Y
VCCI, MIC	Y	Y	Y	Y	Y	Y
EC	Y	Y	Y	Y	Y	Y
FCC	Y	Y	Y	Y	Y	Y
RRA	Y	Y	Y	Y	Y	Y
BSMI, NCC	Y	Y	Y	Y	Y	Y
CTick	Y	Y	Y	Y	Y	Y

**Table 1.** Compliance applicable for components used in the standard design

### Standard Enclosure:

The Standard enclosure conforms to all of the above standards. Changes to the standard design are permissible provided that any changes or additions utilize pre-certified components. Plastic connectors are used in the standard enclosure and the body, front and rear panels do not provide any electrical conductivity for EMC shielding.

### EMC Enclosure:

The EMC enclosure conforms to all of the above standards with additional EMC Susceptibility and EMC Immunity that may be required for sensitive environments. Changes to the standard design are permissible provided that any changes or additions utilize pre-certified components. Metal shielded connectors are required in the EMC enclosure to ensure complete electromagnetic encapsulation and protection. The body, front and rear panels provide effective electrical conductivity for EMC shielding.

### EMC Testing and Certification:

The Standard and EMC enclosures have not been formally certified for any of the standards in Table 1. The assumption is made that if all components are pre-certified, then the combination of those components will be compliant.

Since each combination of options together with customizations will differ for each specific application we do not warrant or guarantee compliance with any of the standards specified in Table 1.

We offer a complete EMC Compliance Test House service for customers requiring a formal Declaration of Conformance.

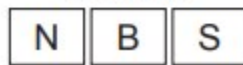
## Mechanical Specifications



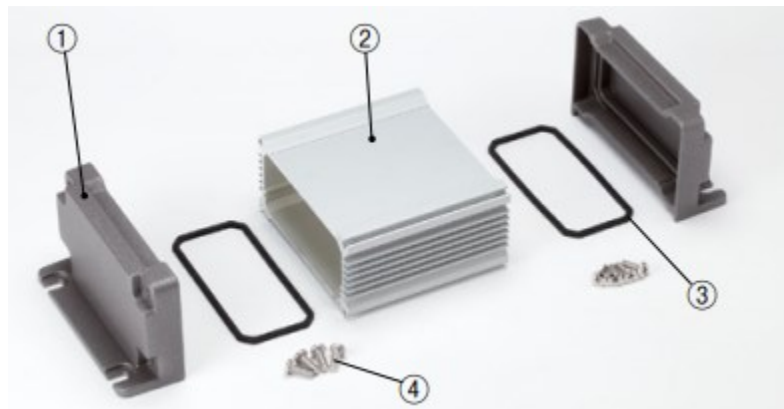
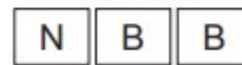
Metallic gray / Silver



Black / Silver



Black / Black



## Mechanical Details

W	H	D	※Thermal resistance (°C/W)
206.3	87	210	1.99

Ref. #	Part name	Pcs	Material	Color / Finish
1	Flanged side plate	2	Die-cast aluminium	Metallic gray · Black / Powder coated
2	Body frame	1	Aluminium extrusion	Silver · Black / Anodized
3	Gasket	2	Silicone	Black
4	Screw	8	Stainless steel	Unfinished

## Thermal Characteristics

Storage Temperature Range	Min: -40 C	Max: +105 C
Operational Temperature	Min: -0 C	Max: +70 C

Note: Operational Temperature limited by Jetson Nano Dev Kit module operational temperature range at maximum continuous power

