Petoi Product comparison & FAQs

Product Comparison

		Bittle	Nybble
Robot	Appearance	Dog	Cat
	Software supported	CodeCraft (scratch-based); Arduino IDE; a Python API sending serial commands	Arduino IDE; a Python API sending serial commands
	App	3rd party Android / iOS app	
	Assembly time by Petoi	40 mins	100 mins
	Dimensions	200 x 110 x 110mm, 7.9 x 4.3 x 4.3inch	250 x 107 x 140mm, 10 x 4.2 x 5.5inch
	Weight	290g(10.2oz)	320g(11.2oz)
	Number of joints	9	11
	Frame material	plastic	wood
	Colors	Black+Yellow	N/A
Controller	Controller board	NyBoard V1	
	CPU	ATMega328PA	
	External EEPROM	64Kbit	
	IMU	6-Axis MPU6050	
	PWM channels	16	
	Grove	4	
	RGB LED (NeoPixel)	7	
	Built-in connectivity & features	Serial UART, I2C network, infrared receiver, buzzer	
	Bluetooth/WiFi connectivity	Official dongles	
	Raspberry Pi support	Yes	
Servo	Servo	P1S	DS031
	Quantities in pack	10	11
	Max voltage	8.4V	
	Wall Material	Plastic	
	Gear	Alloy	
	Motor	Coreless	Cored
Battery	Battery Type	Li-ion battery pack	2x 14500 Li-ion batteries
	Battery included	Yes	No
	Capacity	Typ. 7.4V 1000mAh	Typ. 3.7V 800mAh x 2
	Current typ./max.	2A/5A	1A/2A
	Battery life	1 hour	40 minutes
	Charger	USB 5V 1A	Universal 14500 Li battery charger
	Charge time	2h	1.5h
	Charger included	No	No
Cable	USB cable	regular micro USB included for charging & wired connection	regular micro USB included for wired connection

FAQs

Software & Demo

What programming languages and tools do your robots support?

- Coding can be done in C-style language with the Arduino IDE.
- We also have a Python API sending serial commands.
- Bittle can be programmed with a Scratch-like web-based IDE Codecraft and curriculum.
- Petoi provides Petoi Controller, an open-source desktop program, to set up and control the robots. The Mac & Windows programs can be downloaded here.
- The Code & Robots iOS/Android app from one of our fans is an open source robot app & DIY kit that supports the control of Petoi's robots. It also supports adding

customized control. Please check the documentation for more details.
- We also have fans-contributed support. Please see here for more details.
- In the work
  - mobile apps to set up and control the robots

Where can I see more demos of your robots?

- Our youtube channel has a lot of videos.
- Our Twitter feed contains video demos from our users.
- Our forum also has showcases from our users.

Do you have demo codes?

- Please check out https://github.com/PetoiCamp/OpenCat/tree/main/ModuleTests.

Where are your open-source codes?

- OpenCat is our open-source quadruped robot framework.
  - The code has been deployed on more than 6000 units we shipped worldwide
  - The code has also been deployed on many DIY quadruped robots inspired by our project
- The obsolete version of OpenCat has over 1,300 stars on Github.

Hardware

What certifications does Petoi have?

- FCC, CE, RoHS
- Bittle's battery has acquired the certificates for air and sea transportation

Where can I find more info about NyBoard?

- https://docs.petoi.com/nyboard

What connection methods do Petoi robots support?

- Wired serial connection via USB programmer
- Bluetooth dongle
- WiFi dongle

What are the supporting modules?

- There are four Seeed Grove sockets on NyBoard V1 for extensible modules.
- We picked a few sensor modules as optional accessories: https://bittle.petoi.com/extensible-modules
- For more information about the supported modules, please check out https://www.seeedstudio.com/category/Grove-c-1003.html
- You can connect other modules using the 2.54mm connectors on NyBoard V1

Where can I find documentation for the intelligent camera module?

- specification
- online documentation
- advanced user manual

Do your robots support voice-based input?

- they have a built-in noise detection module.
- if you equip them with a sound module, they can be programmed to do voice recognition and act on voice commands accordingly.

Where can I find documentation?

- https://docs.petoi.com/

What single board computers do your robots support?

- Our robot supports communication with another micro-controller/computer(such as Raspberry Pi, Nvidia Jetson Nano, micro:bit) through wired or wireless connections. The control structure of both the wired and wireless connections is based on serial UART.
- Bittle supports connecting to a Raspberry Pi 3A+/Zero directly. It will power the Pi and communicate with the Pi through the serial port.
- For other Pi models and MicroBit, they can be wired to the robot but have some geometric constraints.
- Jetson Nano is too big for the robots so only the wireless connection is recommended.

Company

Where is Petoi based?

- Petoi LLC was founded in the US.
- Our team is distributed in Silicon Valley, California, and China.

Where are the products manufactured and shipped from?

- China