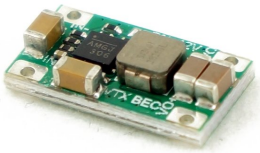
Nano BEC 2-6S

Readytosky · 5V/3A and 12V/2A
User manual



Read this manual before wiring the module. The module is set to 5 V output at the factory.

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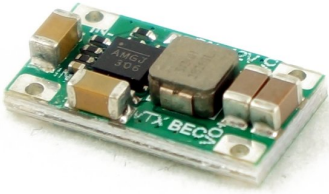
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1. Product description

1.1 What it is for

Readytosky Nano BEC is a small voltage converter (BEC – *Battery Eliminator Circuit*) that produces a regulated supply voltage of **5 V** or **12 V** from a 2S–6S Li-Po battery. It is suitable, for example, for powering a camera, a video transmitter (VTX) or LEDs on an FPV drone or another RC model.

By default the module provides a **5 V output with up to 3 A**. After the solder jumper is bridged, it switches to a **12 V output with up to 2 A**. The module has no wires or connectors – the leads are soldered directly to the solder pads on the board.



Readytosky Nano BEC 2-6S 5V/3A and 12V/2A

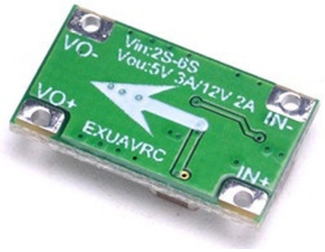
1.2 Specifications and package contents

Manufacturer	ShenZhen ReadytoSky Technology Co., Ltd. (Readytosky)
Product designation	Micro 2-6S 5V/3A and 12V/2A UBEC
Input voltage	2S–6S Li-Po battery
Output – default	5 V, max. 3 A
Output – jumper bridged	12 V, max. 2 A
Dimensions	16 × 9 × 3.5 mm
Weight	0.9 g
Package contents	1× BEC module
Not included	wires, connectors, heat-shrink tubing, battery

2. Wiring and use

2.1 Solder pads

The pad markings are printed on the underside of the board together with the ratings *Vin: 2S-6S* and *Vou: 5V 3A / 12V 2A*.

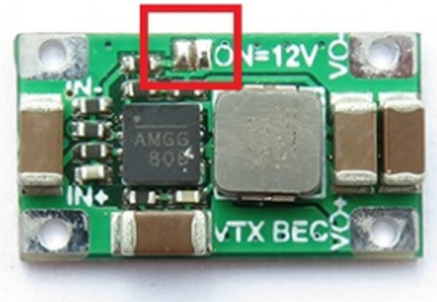


Underside of the board with the solder pad markings

Pad	Function
IN+	input, positive (+) – from the battery or the power pads of the FC/PDB
IN−	input, negative (−, GND)
VO+	output, positive (+) – to the powered device
VO−	output, negative (−, GND)

2.2 Selecting the output voltage

- **5 V** – factory default. Leave the jumper open, no modification needed.
- **12 V** – bridge the two solder pads of the jumper next to the *ON=12V* marking on the top side of the board with solder (red frame in the picture).



ON=12V jumper – bridging the pads switches the output to 12 V

Modify the jumper only with the power disconnected. Always measure the output voltage with a multimeter before connecting the powered device. A device designed for 5 V will be destroyed if supplied with 12 V.

If you select 12 V, verify by measurement that the output reaches 12 V with the battery you will actually use, including at a lower state of charge.

2.3 Wiring procedure

① Disconnect the battery and work only on an unpowered model.

② Select the output voltage according to Chapter 2.2.

③ Solder the input wires to the **IN+** and **IN−** pads and their other ends to the power pads of the flight controller (FC), the power distribution board (PDB) or the battery lead. Observe the polarity.

④ Solder the output wires from the **VO+** and **VO−** pads to the powered device.

⑤ Insulate the module (e.g. with heat-shrink tubing) and mount it so that it does not touch the carbon frame or any other conductive parts – carbon fibre is electrically conductive.

⑥ Before connecting the powered device, connect the battery (ideally through a protective device such as a *smoke stopper*) and measure the output voltage with a multimeter.

⑦ Only then connect the device and check that it works.

2.4 Safety rules

- The total current drawn by all connected devices must not exceed **3 A at 5 V** or **2 A at 12 V**.
- Connect only a 2S–6S Li-Po battery to the input (a fully charged 6S Li-Po = 25.2 V). LiHV batteries are not listed in the manufacturer's specification.
- Reverse polarity on the input or a short circuit on the output may destroy the module and the connected devices.
- Do not solder or modify the module while it is powered.
- The module heats up under load. Do not place it directly next to heat-sensitive components and do not cover it with thermally insulating material.
- Protect the module from moisture, water and conductive debris (metal filings, carbon dust).

2.5 Troubleshooting

Problem	Cause and solution
No voltage at the output	Check the polarity and the solder joints on the input and output, and measure the voltage on the IN+ and IN− pads.
Output does not reach 12 V	The ON=12V jumper is not reliably bridged, or the battery voltage is too low. Check the joint and measure the input voltage.
Device restarts by itself	The connected devices draw too much current. Add up their consumption and compare it with Chapter 1.2.
Module is very hot	Overload or insufficient cooling. Reduce the load and place the module in the airflow.

3. Information for the EU and Czech Market

3.1 Importer and responsible person in the EU

The product is placed on the European Union market by the importer stated below, who is at the same time the responsible person within the meaning of Article 16 of Regulation (EU) 2023/988 of the European Parliament and of the Council on general product safety (GPSR).

Importer / responsible person in the EU	Rotorama, s.r.o.
Company ID (IČO)	051 57 692
VAT ID (DIČ)	CZ05157692
Registered office	Okrajová 1351, 674 01 Třebíč, Czech Republic
E-mail	info@rotorama.cz
Phone	+420 252 252 098
Website	www.rotorama.com

3.2 Disposal of electrical equipment



- The crossed-out wheeled bin symbol on the product, its packaging or in the documentation means that at the end of its service life the product **must not be disposed of together with mixed municipal waste**.
- Hand it over at a take-back point for electrical equipment – at a collection yard, at a take-back point of a collective system, or at the retailer when purchasing a new equivalent product. Take-back is free of charge for the end user.
- The obligations under Act No. 542/2020 Coll., on end-of-life products, are fulfilled by the importer through a collective take-back system.
- Proper disposal helps prevent negative impacts on the environment and human health and contributes to the reuse of secondary raw materials.

Through its contractual partner **ASEKOL a.s.**, the company ensures the take-back of waste electrical equipment from households and the separate collection of waste electrical equipment, batteries and accumulators in accordance with the applicable legislation. The customer is entitled to hand over old electrical equipment or a battery or accumulator at any collection point of the above contractual partner. The addresses of these take-back points are listed at www.asekol.cz, www.ecobat.cz and also https://visoh2.mzp.cz/RegistrMistZO/RegistrMistZOPublic/MapaMistZpetOdberu.

4. Warranty and rights arising from defective performance

The rights and obligations of the contracting parties are governed by Czech law, in particular by Act No. 89/2012 Coll., the Civil Code, and Act No. 634/1992 Coll., on consumer protection.

- The seller is liable to the buyer for the product being free of defects on receipt. If the buyer is a consumer, a defect may be notified **within two years of receipt** of the product (Section 2165 of the Civil Code).
- If a defect appears within **one year** of receipt, the product is deemed to have been defective already at the time of receipt (Section 2161(5) of the Civil Code).
- When purchasing online, a consumer has the right to **withdraw from the contract within 14 days** of receiving the goods without giving a reason (Section 1829 of the Civil Code).
- Claims should be made with the retailer from whom you purchased the product. The importer's contact details are given in Chapter 3.1.
- The competent body for out-of-court settlement of consumer disputes is the **Czech Trade Inspection Authority**, Štěpánská 796/44, 110 00 Prague 1, www.coi.cz.