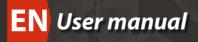


## MAX BEC/SBEC





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## MAX BEC / SBEC

### 1 Introduction

**English** 

The MAX BEC / SBEC voltage regulator is designed to power the on-board system in the model (receiver and servo power supply), which uses LiXX cells to power it. The regulator ensures that the power supply to the servos is constant at all times and the result is the same speed of movement of the servos, regardless of the state of discharge of the power cells. The switched regulator (SBEC) offers the possibility of connecting the input voltage in a wide range, from 2S up to 15S Li-XX cells.



#### 2 Linear voltage regulator

#### 2.1 Single BEC

**Single BEC** is a linear regulator to provide power for a standard servo with a maximum input voltage of 6V. The Single BEC can also be used to provide power for the control units of helicopters or multicopters.

SingleBEC has a fixed output voltage of 5.5V. It is therefore designed for servos 4,8 - 6V. The SingleBEC contains an internal, resettable fuse which protects against short circuit and overload. If a short circuit or overload occurs, the output voltage decreases to zero until the short circuit or overload is removed.

Its great advantage is that it allows the use of standard servos in systems designed for the so-called High-Voltage servos (8,4V). Its internal filtering improves the quality of the output voltage for the servo.

The small size and low weight of the SingleBEC allows for very simple installation in all parts of the plane. Due to its performance parameters the Single BEC is suitable for the category of micro and mini servos with load strengths up to 25 kg/cm at 6V.

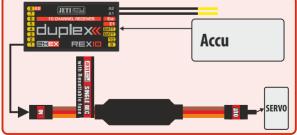


FIG. 1: Example of Single BEC connection

#### 2.1.1 Parameters Single BEC:

Dimensions: 19x9,3x6,6 mm

Weight: 5 g
Recommended input voltage: 5,5-8,4V

Input voltage max: 24V
Output voltage: 5,5V
Sustained current: 1A
Peak current: 15 A

#### 2.2 MAX BEC

**MAX BEC** can be supplied either by NiXX or LiXX cells, recommended is 2 LiXX cells or 5-6 NiXX cells. Input voltage is indicated by four LEDs. If the input voltage is above 7.0 V, all three green LEDs are ON. While the cells are gradually discharging, particular LEDs go OFF depending on input voltage (lower then 7 V, 6.7 V, 6.45 V). If the input voltage is under 6.5 V, the red LED goes ON indicating that cells are discharged (if using 2S LiXX then it means that voltage of particular cells is under 3.25 V). Output voltage is extracted from output side with 2 links. It is recommended to connect both 2-links, it results in higher reliability and lower current loading on connectors.

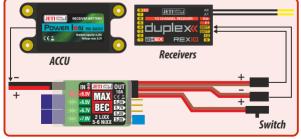


FIG. 2: Example of MAX BEC connection

#### 2.2.1 Parameters MAX BEC:

Dimensions: 50x25x10 mm

Weight: 28 g Recommended input voltage: 5.5 - 8.4 V

Input voltage max.: 16V

Output voltage: 5.0 V / 5.4 V / 5.7 V / 6.0 V

Peak current (max. 30s): 12 A Sustained current: 5 A

Input voltage (number of cell)	5 V	6 V			
(number of cen)		Sustained	current [A]		
2 Lixx / 6 NiXX	2.92 A	3.50 A	4.12 A	5.00 A	
3 LiXX / 10 NiXX	1.15 A	1.23 A	1.30 A	1.37 A	
12 NiXX	0.85 A	0.90 A	0.93 A	0.97 A	

#### **2.3 MAX BEC2**

#### 2.3.1 Output voltage setting and LED function

By means of the provided shorting plugs (jumpers) the requested output voltage of the regulator can be adjusted in steps of 5.0 V, 5.4 V, 5.7 V and 6.0 V. The **MAX BEC 2** supply can consist of LiXX or NiXX cells. For this purpose we recommend application of 2 LiXX cells or 5-6 NiXX cells. The supply battery voltage is indicated by four LEDs (1x red and 3x green). In case of a voltage higher than 7.0 V all three green diodes are ON, during discharge of the cells their voltage will gradually decrese and the particular LEDs will turn off one by one according to the input voltage decrease, i. e. when the voltages become lower than 7V, 6.7 V and 6.5 V. If the input voltage becomes lower than 6.5 V the red LED lights up indicating discharged cells. This shows in case of 2S LiXX batteries that the voltage per cell decreased below 3.25 V.

#### 2.3.2 Wiring

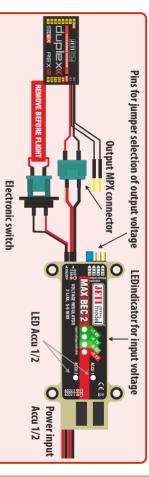
The supply batteries should be connected by cables of a cross section of at least 1.5 mm to the terminals of the MAX BEC 2 marked ACCU 1 and 2. The MAX BEC 2 regulator allows connection of two supply batteries. The LED-diode indicates whether the current is drawn from battery 1 or from battery 2. The decision about which battery has to deliver energy depends upon battery voltage, as a rule the battery with higher voltage is delivering current (if the voltage of both batteries is equal current is drawn from both of them and LEDs of batteries 1 and 2 are ON). There exists no energy exchange between the batteries if the voltages of both batteries are different, therefore both batteries may be of different capacities, cell numbers and types. If only one supply battery is used for the MAX BEC 2, it may be connected either to input ACCU 1 or ACCU 1

#### 2.3.3 Switch

The regulator MAX BEC 2 contains an electronic switch for switching it on or off. The switch is a so called "safe" switch (REMOVE BEFORE FLIGHT), in case of mechanical damage of solder joints or cables the BEC-function stays unimpaired.

#### **Notice:**

In order to ensure a correct function of the MAX BEC sufficient cooling air should be directed along the cooling fins.



## 2.3.4 Parameters MAX BEC 2

Dimensions: Weight:

85 g

100x29x16mm

Recommended input voltage: 5.5 - 8.4 V Input voltage max.: 16 V

Input voltage max.:
Output voltage:

5.0V/5.4V

/5.7V/6.0V

Peakcurrent (max. 30s): Sustained current:

20 A 12 A

FIG. 3: Example of MAX BEC 2 connection

<b>12 NiXX</b> 2.4	3 LiXX / 10 NiXX 3.28 A	2 Lixx / 6 NiXX 8.3	cells)	(number of 5 V	Input voltage
2.44 A	8 A	3 A	nS	<	
2.56 A	3.51 A	10.00 A	stained	5.4 V	nput vo
2.56 A 3.70 A 3.92 A	3.51A 3.70A 3.92A	8.33 A   10.00 A   11.76 A   12.00 A	Sustained current [A]	5.7 V	Input voltage [V]
3.92 A	3.92 A	12.00 A	A]	61	

#### 2.4 MAX BEC 2D plus

#### 2.4.1 Output voltage setting and LED function

By means of the provided shorting plug (jumper) the requested output voltage of the regulator can be adjusted in steps of 5.0 V, 5.4 V, 5.7 V and 6.0 V. Output voltage can be also set by the JETIBOX, overriding the physical position of the shorting plug (jumper). The MAX BEC 2D Plus supply can consist of LiXX or NiXX cells. For this purpose we recommend application of 2 LiXX cells or 5-6 NiXX cells. The supply battery voltage is indicated by four LEDs (1x red and 3x green). In case of a voltage higher than 7.0 V all three green diodes are ON, during discharge of the cells their voltage will gradually decrese and the particular LEDs will turn off one by one according to the input voltage decrease, i. e. when the voltages become lower than 7 V, 6.7 V and 6.5 V. If the input voltage becomes lower than 6.5 V the red LED lights up indicating discharged cells. This shows in case of 2S LiXX batteries that the voltage per cell decreased below 3.25 V.

#### 2.4.2 Wiring

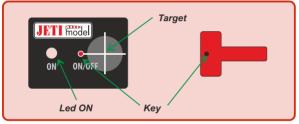
The supply batteries should be connected by cables of a cross section of at least 1.5 mm to the terminals of the MAX BEC 2D Plus marked ACCU A and B. The MAX BEC 2D Plus regulator allows connection of two supply batteries. The LED-diode indicates whether the current is drawn from battery A or from battery B. The decision about which battery has to deliver energy depends upon battery voltage, as a rule the battery with higher voltage is delivering current (if the voltage of both batteries is equal current is drawn from both of them and LEDs of batteries A and B are ON). There exists no energy exchange between the batteries if the voltages of both batteries are different, therefore both batteries may be of different capacities, cell numbers and types. If only one supply battery is used for the MAX BEC 2D Plus, it may be connected either to input ACCU A or ACCU B.

#### 2.4.3 Switch - Magnetic switch

The magnetic switch is designed to turn the **MAX BEC 2D Plus** on or off and is connected to it by a three-wire cable with a connector. To switch on the MAX BEC 2D Plus, it is necessary to place the supplied magnet in the carrier on the target so that the key of the carrier and the key on the magnetic switch are the same orientation. The magnetic switch has a green LED indicating "on".

**Green LED "on"** - If the green LED is blinking, this indicates that the magnetic key is present, but the unit is not switched on yet.

 If the green LED is continuously active, this indicates that the MAXBEC2D PLUS is active and ready to power your receiver and servos.



 ${\it FIG.~4: Description~of~the~magnetic~switch~and~key}$ 

Safety Precautions for the Manipulation of Magnets:

Since the MAXBEC 2D Plus contains magnetic components, it is necessary to follow some simple rules for the handling of magnets. The magnet is contained within a special holder made of aluminium.

- Keep the magnet a safe distance from all devices that could be damaged by magnetic interference: Televisions, Credit Cards, PC's and Pacemakers!
- 2. Keep magnets away from children, due to the risk of ingestion or injury!

#### 2.4.4 Switch - RC switch

**MAX BEC 2D PLUS** supports on/off via RC Switch. It can be easily used in JETI DC/DS transmitters.

- $\textbf{1.} \ Disconnect the connector with a lock on the three-wire cable and separate the magnetic switch.$
- **2.** Connect **MAX BEC 2D Plus** with RC Switch (conrol output) using three-wire cable.
- **3.** Bind the RC Switch with your transmitter and configure it in main *"menu/model/device explorer/RC switch"*.

#### 2.4.5 Connection of MAX BEC 2D Plus telemetry to the Duplex receiver

Connect the three-wire cable (red JR connector) of the MAX BEC 2D Plus to the Ext. input of the Duplex receiver. For Rx receivers, please set the Ext. input as JETIBOX/Sensor. At newer REX receivers the Ext. input will be set automatically.

#### Telemetry of the MAX BEC 2D Plus:

**MAX BEC 2D Plus** sends the following values to the JETI DC/DS transmitter via the DUPLEX system:

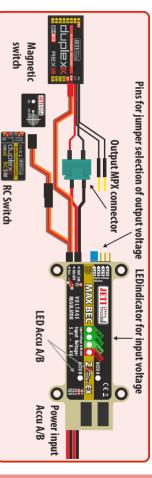
**Acc. Input Volt** – Shows the actual voltage of the power-supply batteries A and B.

Temperature – Shows the temperature of the MAX BEC 2D Plus.

Output voltage – Shows the actual voltage on the output

#### **Notice:**

- 1. Always follow the same procedure when switching on/off. To switch-on, first connect the batteries and then use the magnetic or RC switch to activate the unit. To switch-off, always use the magnetic or RC switch to turn-off the unit before disconnecting the batteries.
- 2. In order to ensure a proper function of the regulator always take care of an sufficient amount of cooling air throughflow.



# 2.3.4 Parameters MAX BEC 2D plus

Dimensions: 85 g 100x29x16mm

Weight:

Recommended input voltage: 5.5-8.4V Input voltage max.: 16V

Output voltage: 5.0V/5.4V /5.7V/6.0V

Sustained current: Peak current (max. 30s): 20 A 12 A

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Input voltage		Input voltage [V]	ltage [V]	
(number of	5 V	5.4 V	5.4V 5.7V	6 V
cells)	nS	ıstained	Sustained current [A]	<u> </u>
2 Lixx/6 NiXX	8.33 A	10.00 A	8.33 A   10.00 A   11.76 A   12.00 A	12.00
3 LiXX / 10 NiXX		3.51 A	3.28 A 3.51 A 3.70 A 3.92 A	3.92/
12 NiXX	2.44 A	2.56 A	2.44 A   2.56 A   3.70 A   3.92 A	3.92 /

#### 3 Switching regulators

#### 3.1 SBEC

#### 3.1.1 Output voltage setting

The output voltage is adjusted with the aid of a shorting plug (jumper) in steps of 5.0V, 5.5V, 6.0V, 7.0V and 8.0V. An important condition of keeping a correct output voltage in connection with the jumper position is a sufficiently high supply voltage. The supply voltage of the battery must by all means be higher than the required output voltage. We recommend a minimum difference of at least 2V above the output voltage. Otherways the output voltage would decrease under load conditions. The switched-on condition of the regulator and an information about the presence of voltage at its output are signalled by a shining green LED.

#### 3.1.2 Wiring

The switching voltage regulator SBEC comprises two battery input cables with cross-sections of 1mm2 as well as two pairs of output servo cables with cross-sections of 0.5mm2 each. These output cables are equipped with JR-plugs.

#### 3.1.3 Switch

SBEC has mechanical switch for switching the regulator on. This switch is wired in a so called "safety" mode which ensures continuous function of the regulator even if soldering joints or cables become mechanically damaged.

#### 3.1.4 Heat protection

The SBEC contains a heat protection means which prohibits destruction of the regulator by long time effects of excessive current or by a short circuit. This phenomena may, for instance, arise if a servo is short circuited or by an excessive output load. If the heat protection is activated, the regulator, switches off" for a short time necessary to cool down. After cooling down the SBEC switches automatically on again. This affair is signalled by blinking of the green LED. The blinking frequency of the LED depends on the amount of applied load. When the heat protection is activated the output voltage decreases to several hundreds of mV.

#### **Notice:**

In order to ensure a proper function of the regulator always take care of an sufficient amount of cooling air throughflow.

#### 3.1.5 Parameters SBEC:

Dimensions: 60x28x10 mm

Weight: 29 g Recommended input voltage: 6-42 V Input voltage max.: 50 V

Output voltage: 5.0V/5.5V/6.0V/7.0V/8.0V Sustained current: 6.2 A (with supply 2S LiXX) see tab.

Peak current: 12 A (max. 5s)

Number of Lixx Cells	2	3	4	5	6	7	8	9	10
Sustained current* [A]	6.2	5.7	5.4	5.1	4.7	4.5	4.1	3.8	3.5

<sup>\*</sup> Sustained current values are valid only for operating conditions with sufficient cooling airflow

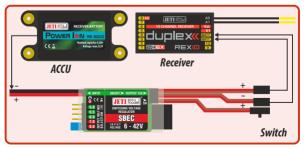


Fig. 6: Example of SBEC connection

#### 3.2 SBEC30D

#### 3.2.1 Output voltage setting

Setup of the output voltage between 5 and 8.4V is accomplished in the JETI transmitter via EX BUS or in the JETIBOX (see chapter "Settings"). The input supply voltage from the batteries must always be higher than the desired output voltage. We recommend that the power supply is at least of 2V higher. Otherwise, the output voltage may decline during the load. The switch on state of the regulator is signaled by the green LED.

#### 3.2.2 Wiring

The voltage regulator **SBEC 30D** comprises two battery input cables with cross-sections of 2.5mm2 used to connect the battery, and two three-wire cables with JR connector, where the red connector is the main EXT and the black connector is used for connecting the external switch (such as Universal Magnetic Switch or RC Switch). On the output there are two cables with cross-sections of 2.5mm2, which are connected to the receiver via MPX connector. In addition SBEC 30D has two EXT connectors that may serve as an expander for other sensors or logical inputs. To connect the sensor to the EXT 1 or EXT 2, the particular output must be configured as Expander.

#### 3.2.3 Switch - Magnetic switch

The magnetic switch is designed to turn the **SBEC 30D** on or off and is connected to it by a three-wire cable with a connector. To switch on the **SBEC 30D**, it is necessary to place the supplied magnet in the carrier on the target so that the key of the carrier and the key on the magnetic switch are the same orientation. The magnetic switch has a green **LED indicating "on"**.

**Green LED "on"** - If the green LED is blinking, this indicates that the magnetic key is present, but the unit is not switched on yet.

- If the green LED is continuously active, this indicates that the **SBEC 30D** is active and ready to power your receiver and servos.

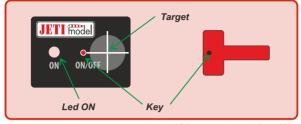


FIG. 7: Description of the magnetic switch and key

 $Safety\, Precautions\, for the\, Manipulation\, of\, Magnets:$ 

Since the MAXBEC 2D Plus contains magnetic components, it is necessary to follow some simple rules for the handling of magnets. The magnet is contained within a special holder made of aluminium.

- 1. Keep the magnet a safe distance from all devices that could be damaged by magnetic interference: Televisions, Credit Cards, PC's and Pacemakers!
- 2. Keep magnets away from children, due to the risk of ingestion or injury!

#### 3.2.4 Switch-RCswitch

**SBEC 30D** supports on/off via RC Switch. It can be easily used in JETI DC/DS transmitters.

- **1.** Disconnect the connector with a lock on the three-wire cable and separate the magnetic switch.
- Connect SBEC 30D with RC Switch (conrol output) using threewire cable.
- **3.** Bind the **RC Switch** with your transmitter and configure it in main *"menu/model/device explorer/RC switch"*.

#### Notice:

1. Always follow the same procedure when switching on/off. To switch-on, first connect the batteries and then use the

magnetic or RC switch to activate the unit. To switch-off, always use the magnetic or RC switch to turn-off the unit before disconnecting the batteries.

2. In order to ensure a proper function of the regulator always take care of an sufficient amount of cooling air throughflow.

#### 3.2.5 Heat protection

The switching voltage regulator SBEC 30D contains a heat protection means which prohibits destruction of the regulator by long time effects of excessive current or by a short circuit. This phenomena may, for instance, arise if a servo is short circuited or by an excessive output load. If the heat protection is activated, the regulator "switches off" for a short time necessary to cool down. After cooling down the **SBEC 30D** switches automatically on again.

#### 3.2.6 Setup

The condition of correct voltage is sufficient supply. The input supply voltage from the batteries must always be higher than the desired output voltage. We recommend that the power supply is at least of 2V higher. Otherwise, the output voltage may decline during the load. The switch on state of the regulator is signaled by the green LED.

#### Notice:

- 1. Always make sure that all the connected devices, such as receivers, sensors and especially servos have the range of permitted input voltage in the value of input voltage set by you.
- 2. Always adjust the output voltage when the devices are disconnected.

#### 3.2.6.1 Configuration via JETIBOX

After connecting the **SBEC 30D** to the **JETIBOX**, a startup screen appears that contains identification of the device and the value of consumed capacity of the battery in the first line of the JETIBOX display. The second line contains the data (from the left) of the input

 $voltage \, (e.g. \, battery \, voltage) \, and \, the \, value \, of \, output \, voltage.$ 

Using buttons  ${\bf U}$  and  ${\bf D}$  (down and up arrows) of the JETIBOX it is possible to browse through the menu (direction to the main screen).

By pushing the  $\bf R$  button (right arrow) and  $\bf L$  button (left arrow) it is possible to set individual items. The menu will then show these settings:

The items of "ACTUAL VALUES":

Accu Voltage - actual input voltage value, battery voltage

Accu Current - actual current flowing from the battery

**Accu Capacity** – actual value of consumed capacity from the battery, resetting is performed via "MIN/MAX" section

Output Voltage – actual value of BEC's output voltage

Temperature - actual temperature value (in °C)

#### The items of "MIN/MAX":

**Reset MIN/MAX** – by pushing the arrows R and L (left and right) together, the minimum and maximum are reset, as well as the data of consumed capacity

**AccuV MIN/MAX** – data of the minimum and maximum voltages, i.e. battery voltage

Accul MAX – indicates the maximum current from the battery

**Temp.** MIN/MAX – data of the minimum and maximum temperature of SBEC 30D

#### The items of "SETTING":

Output Voltage – setting the output voltage of the BEC

**Ext1 Mode and Ext2 Mode** – setting the EXT1 output according to the requirements as:

**Expander** – expander EX BUS, possibility to connect devices that support EX Bus Protocol

Log. Input – reading the logical input, see the chapter "Alternative functions – logical input"

Off - switched off, EXT1 output is not used

To switch between items, press left or right arrow for a longer period.

**Capacity Alarm** – setting the level of capacity taken from the battery at which the alarm will sound

**Current Alarm** – setting the level of current drawn from the battery at which the alarm wil sound

**MinVoltage Alarm** – if the battery voltage drops below the set level, the alarm will sound

OverTemp Alarm – indicates alarm fort the SBEC30D overheating

#### The items of "SERVICE":

Factory Defaults – pushing arrows  ${\bf L}$  and  ${\bf R}$  (left and right) together leads to loading the default settings of the **SBEC 30D** 

SBEC30D v. xx.xx ID xxxxxxxxxx – designation of the product with the firmware version and the serial number (ID).

#### Alternative functions logical input

Using a pin as the input is useful because of simple feedback, without the use of telemetry sensors. If you install, for example, limit switches on a retractable undercarriage, you can have feedback about its condition during operation. The condition of digital inputs is transmitted via EX telemetry and sounds or alarms can be assigned to the events.

- This way the pin is configured as the input and its condition (disconnected, connected to the ground) is transmitted to the transmitter as other telemetry values from the sensors.
- Only keep the pin disconnected or connected to the common around of the SBEC 30D.

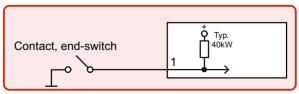


FIG. 8 Example of logic input connection

Never connect to a different voltage. The pin works exclusively on the Pull-Up mode. Pull-Up.

#### 3.2.6.2 Configuration via the DC/DS transmitter

The **SBEC 30D** can be configured by a DC/DS transmitter via the *"Device Explorer"* menu. It is necessary to follow these rules for configuring the SBEC 30D via transmitter:

- Receiver firmware version Duplex 3.12 (REX 1.10) and newer
- The receiver must be connected to the SBEC 30D via EX bus
- Transmitter firmware version 4.28 and newer
- File SBEC30D.bin stored in the " Devices " folder on the transmitter SD card

When everything is properly connected and configured, the SBEC 30D item appears in the "Device Explorer" menu. Entering the item moves you to the configuration menu.



#### **General settings**

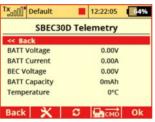
- Voltage settings setting the output voltage of the BEC.
- Expander settings setting the alternative functions of Ext1, Ext2 outputs.

**Off**- EXT is not used, **Expander** – EX Bus, possibility to connect a sensor and other devices supporting the EX Bus protocol, Log.input – logical input



#### Telemetry

- BATT Voltage actual battery voltage, input voltage
- BATT Current actual current drawn from the battery
- **BEC Voltage** actual output voltage of the BEC
- BATT Capacity actual capacity taken from the battery
- Temperature actual temperature of the BEC



#### Telemetry Min/Max

- Clear Min/Max switch here you can assign a control on the DC/DS transmitter which clears battery capacity and the recorded minimum/maximum values of the SBEC30D.
- Clear now allows you to immediately clear the recorded battery capacity and minimum/maximum values in the SBEC30D.
- Min. BATT Voltage the data of minimum input value, e.g. battery voltage

- Max. BATT Voltage the data of maximum input voltage, e.g. battery voltage
- Max. BATT Current the data of maximum current from the battery
- Min. Temperature the data of minimum temperature of the SBEC30D
- Max. Temperature the data of maximum temperature of the SBEC 30D



#### **Update**

**SBEC 30D** allows firmware update via a PC. The update is performed using the JETI USBa and JETI Studio.

#### Procedure:

- o You will find the **JETI Studio program** on our website in the "**support**" section. Save it to your computer and install it.
- Connect the USB adapter to your computer. The procedure of installing drivers for the USB adapter is to be found in the user manual for the USB adapter.
- o Start the JETI Studio update program on your PC.
- o Connect the USB adapter via three-wire cable to the main EXT of the SBEC 30D (red JR connector).
- o Connect the power supply to SBEC 30D, then the update starts. If magnetic switch or RC switch is connected, it is necessary to switch it on.

#### 3.2.7 Parameters SBEC 30D:

Dimensions: 72x28x14 mm

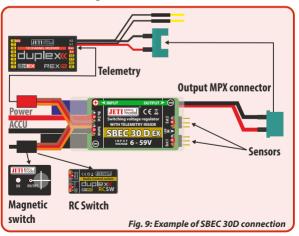
Weight: 50 g
Recommended input voltage: 6-42 V
Input voltage max.: 59 V
Output voltage: 5.0 V-8.4 V

Sustained current: 8.2 A (with supply 2S LiXX) see tab.

Peak current: 30 A (max. 1s)

Number of Lixx cells	2	3	4	5	6	7	8
Sustained output current* [A]	8.2	7.4	6.4	5.8	5.4	5	4.5
Number of Lixx cells	9	10	11	12	13	14	15
Sustained output current* [A]	3.8	3.5	3	2.6	2.2	1.8	1.8

<sup>\*</sup> Sustained current values are valid only for operating conditions with sufficient cooling airflow





#### 4 Warranty

For the product we grant a warranty of 24 months from the day of purchase under the assumption that it has been operated in conformity with these instructions at recommended voltages and that it has not been damaged mechanically. Warranty and post warranty service is provided by the manufacturer.

We wish you successful flying with the products of:

#### JFTI model s.r.o

Lomená 1530, 742 58 Příbor. www.ietimodel.com

#### ENGLISH

Information on Disposal for Users of Waste Electrical & Electronic Equipment (private households)



This symbol on the products and/or accompanying documents means that used electrical and electronic products should not be mixed with general household

For proper treatment, recovery and recycling, please take these products to designated collection points. where they will be accepted on a free of charge basis. Alternatively, in some countries you may be able to return your products to your local retailer upon the purchase of an equivalent new product. Disposing of this product correctly will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling. Please contact your local authority for further details of your nearest. designated collection point. Panalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

#### For business users in the European Union

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

#### Information on Disposal in other Countries outside the European Union

This symbol is only valid in the European Union.

If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.



#### **Declaration of Conformity**

in accordance with the regulations of EU Directive EMC 2014/30/EU, RoHS 2011/65/EU and (EU) 2015/863

This declaration of conformity is issued under the sole responsibility of the manufacturer.

Producer: JETI model s.r.o.

Lomená 1530, 742 58 Příbor, Česká republika

IČ 26825147

#### Declares, that the product

Type designation: Linear regulator

Model number: Single BEC, MAX BEC, MAX BEC2, MAX BEC 2Dplus

Country of origin: Czech republic

The stated product complies with essential requirements of EMC 2014/30/EU, RoHS Directive 2011/65/EU and (EU) 2015/863.

Harmonised standards applies:

Protection requirements concerning electromagnetic compatibility [6]

EN 61000-6-3:2007 + A1:2011

Electrical Safety and Health [3.1(a)]

EN 62368-1:2015 EN 62479:2010

RoHS

EN 50581:2012

Ing.'Stanisiav Jelen Managing Director



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in accordance with the regulations of EU Directive EMC 2014/30/EU, RoHS 2011/65/EU and (EU) 2015/863

This declaration of conformity is issued under the sole responsibility of the manufacturer.

Producer: JETI model s.r.o.

Lomená 1530, 742 58 Příbor, Česká republika

IČ 26825147

#### Declares, that the product

Type designation: Switching regulator Model number: SBEC, SBEC 30D Country of origin: Czech republic

The stated product complies with essential requirements of EMC 2014/30/EU, RoHS Directive 2011/65/EU and (EU) 2015/863.

#### Harmonised standards applies:

Protection requirements concerning electromagnetic compatibility [6]

EN 61000-6-3:2007 + A1:2011

Electrical Safety and Health [3.1(a)]

EN 62368-1:2015 EN 62479:2010

RoHS

EN 50581:2012

Ing.'Stanislav Jelen Managing Director



#### **JETI model s.r.o.** Lomená 1530, 742 58 Příbor Czech Republic

www.jetimodel.com www.jetimodel.cz info@jetimodel.cz