Linear regulator MAX BEC

Linear regulator MAX BEC is sophisticated tool regulating a voltage in models which have receiver and servos powered by 2 LiXX cells or more NiXX cells. Servos voltage is constant during entire flight and it results in smooth servos motion.

Technical data:

Recommended input voltage:	5,5-8,4 V
Max. input voltage:	16 V
Output voltage:	5.0 V, 5.4 V, 5.7 V, 6.0 V
Pulsed current:	12 A
Continuous current:	5 A (see table below)
Idle current:	17 µA
Max. power loss:	7 W
Max. temperature:	130 C
Weight:	25 g
Dimensions:	50 x 25 x 10 mm

Required output voltage (5.0 V, 5.4 V, 5.7 V, 6.0 V) is selected by jumper plug.

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).

Supply cells must be connected into input side with two 0.5 mm^2 cables. There is also parallel-connected 3link with JR connector which is intended for cells charging, without a need for disconnection of power connectors. Maximum charging current is 0,5 A (limited by connector).

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. The connectors may be plugged in any channel of the receiver.

On the output side, there is switch extracted, which activates the regulator. The switch is connected as “safe”; it means that mechanical damage of joints or wires has no impact on BEC function.

Datasheet - Continuous current load depending on input/output voltage:

Input voltage (number of cells)	Output voltage [V]			
	5	5.4	5.7	6
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]