

The MULi6s sensor is used for monitoring the voltage of lithium based batteries and can measure the voltage of individual battery cells using the 7-pin balance connection. With the help of this sensor it is possible to monitor the minimum and maximum cell voltage as well as the total battery voltage. Not only that, but the Duplex system allows for alert conditions to be defined, in order to sound an audible alarm when voltages drop below desired levels.

The unit uses the 2.4GHz band to communicate, not only allowing data to be sent from the transmitter to the receiver, but also allowing the receiver in the model to transmit data back to the user. In this manner, telemetric data obtained during operation is transferred in real-time and the current state of the system can be presented on the LCD screen of the Jeti Box.

Dimensions	36 x 20 x 5 mm
Weight (with cables)	6 g
Accuracy	0 – 4.4V
Operating Temperature	-10°C → +85°C
Input voltage	3.5 – 8.4 V
Current draw	9 mA

Parameter settings for MULi6s

All parameter settings and data readouts must be performed through the Jeti Box (available separately). After connecting, the sensor identification, the number of cells connected to the unit, the lowest cell voltage and the number (#) of the cell with the lowest voltage are shown on the LCD screen of the Jeti Box. By pressing the Down button of the Jeti Box, the MULi6s sensor menu is displayed.

MULi6s MENU: *Actual Value* – Pressing the down button selects between displaying the following actual measured values:

Individual voltage – By repeatedly pressing the D button, the voltage of each connected cell is shown

MULi6s MENU: *MIN / MAX* – Navigating the menu of the Jeti Box allows the minimum and maximum extremes of voltage be viewed. These values are automatically erased from the sensor when the configured trigger level is next exceeded. Alternatively the values can be erased manually using the the *Setting → Erase Data* option.

U MIN/MAX – Shows the minimum and maximum voltage of the currently selected cell. Using Up and Down keys moves between the cells, showing the Min/Max voltage and the cell number (#) for the corresponding cell.

MULi6s MENU: *Setting* – Using the ‘down’ button of the Jeti Box, the following options can be accessed within this menu:

Erase data – By simultaneously pressing the left and right arrow buttons, all measured parameters will be erased.

Start Trigger – Set the voltage at which monitoring will begin and any existing data will automatically be erased. Use the Left and Right buttons to set the per-cell voltage.

Beep Alarm – Set the letter of the Morse code to be represented by the alarm from the transmitter, when a low-voltage condition is encountered.

Beep Error - Set up of a morse code letter representing a battery error. If after an identification sequence the number of battery cells changes, a battery error will be generated and this error will be announced acoustically by emitting the above mentioned morse code letter. This function may be deactivated by pushing and holding of the button L (left).

MULi6s MENU: *ALARMS* – Using the down button, it is possible here to change settings for individual alarms.

Low Volt. Alarm – Set the threshold at which an alarm will be generated and your Tx module will emit the sound specified by the ‘Beep Alarm’ letter specified in ‘Settings’. This value can be Off, or between 0 and 4.4V per cell.

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MULi6s MENU: SERVICE – by pressing button D (arrow down) you will change to depiction of the firmware version and to renewal of the sensor default setting.

Factory Defaults – by simultaneous pressing of arrows R and L (right and left) the factory settings of the MULi6s are loaded.

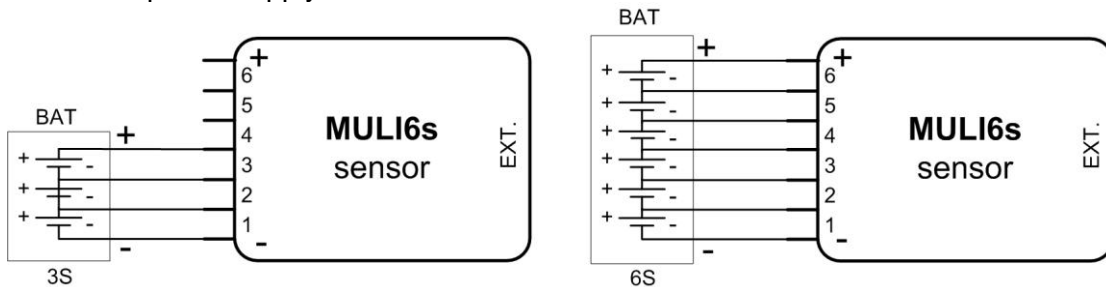
MULi6S v. xx.xx ID xxxxx:xxxxx – product marking with firmware version and series number (ID).

IMPORTANT: Order of connection:

- Connect the sensor to your lithium-based battery via the balance connector (Please note correct polarity)
- Connect the sensor to the receiver or expander
- Connect negative battery terminal to negative ESC/BEC terminal
- Connect positive battery terminal to positive ESC/BEC terminal

Connecting the battery to the sensor

Your lithium-based battery should be connected to the sensor via the balance plug on your battery. Please observe the correct polarity. After connecting, the sensor requires approximately 2 seconds to determine the number of cells connected. During this time the screen of your Jeti Box will indicate progress. If a battery with a different number of cells is connected, the sensor will report an error and must be disconnected from its power supply.

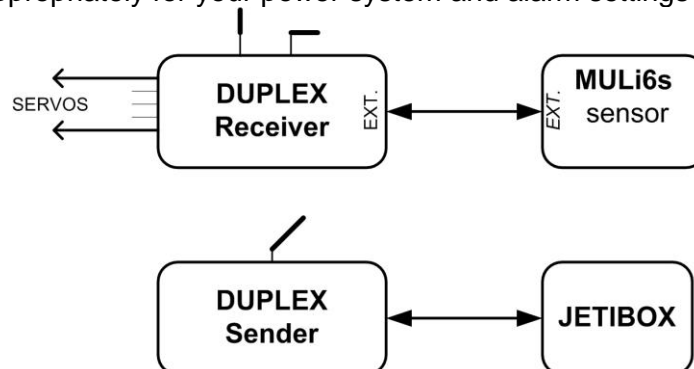


Connecting the MULi6s sensor

1. The three-wire cable with JR connector may be connected directly to the Jeti Box using the Pulse/+/- socket. A power source of 3.5-8.4V must be supplied via the Jeti Box using the +/- socket to power the module. In this configuration the MULi6s sensor can operate as a stand-alone mobile unit, providing measurements on the screen of the Jeti Box. No alarm signals are generated with this configuration, because these are provided by the transmitter module, which is not connected. Alerts are displayed only on the LCD screen.

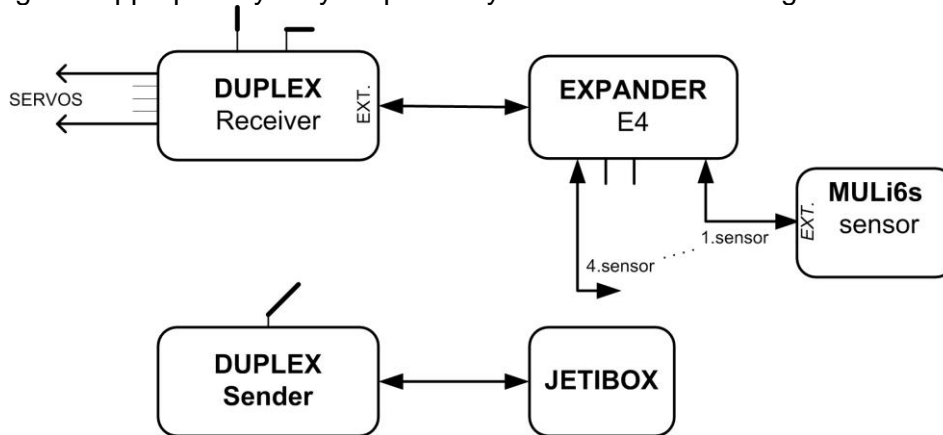


2. Connect the three-wire cable with JR connector directly to the Ext. socket on the Duplex receiver. In this configuration the sensor is powered via the receiver. Switching on the transmitter and receiver allows the sensor to be configured appropriately for your power system and alarm settings to be defined.



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3. Connect the three-wire cable with JR connector to the Jeti Duplex Expander module and ensure that the Expander module is connected to the Duplex receiver. In this configuration the sensor is powered through the expander, which is powered through the receiver. Switching on the transmitter and receiver allows the sensor to be configured appropriately for your power system and alarm settings to be defined.



Firmware Update

The equipment firmware may be updated by a PC via the **converter unit JETI USB Adapter**. In the USB Adapter instructions you will find a description of the installation procedure of the USB Adapter controller as well as the update program.

Warranty

This product has a warranty for a period of 24 months from the date of sale under the provision that there is no physical damage and that the unit has been used in accordance with the operating instructions. Customer service during the warranty period and thereafter is carried out by the manufacturer.

The manufacturer hopes you enjoy these products: **Jeti Model S.R.O Pribor, www.jetimodel.cz**

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Menu navigation via the Jeti Box for MULi6s

