

## Proven Way To Survey in Difficult Conditions

SL800 RTK Receiver-the handy high-precision tool to simplify your surveying work.



Highlight

The equipment of SatLab paves the way for miniaturization and versatility, that is why SatLab SL300 and SLC have positively surprised with their size, quality of field work, low price and versatility in daily work, not only surveyors. These receivers allow measurement with centimeter accuracy without the use of a long pole (a meter pole is long enough) and an external antenna. You can see how these devices work in the field in the video available on our Youtube channel.

Guided by the need for further miniaturization and improvement of users' work, we have created the SatLab SL800 receiver. It's a classic three-frequency RTK instrument that fits in your hand perfectly. It is a miniaturized equivalent of the SatLab SL600 and can compete with the best receivers on the market. The SL800 receives the full range of signals from GPS, GLONASS, BeiDou, Galileo and SBAS navigation satellites. To take full advantage of its possibilities, there is no need to buy additional options, unlock functions or make hardware changes - everything is immediately available to the user in each SatLab receiver. **Let us briefly summarize a few facts about the SL800:** it has the latest NovAtel receiver board running on 555 channels and replaceable batteries allowing about 12 hours of operation and can be recharged by power bank, and it weighs only 700 grams with battery and measures only 12 cm in diameter. Initialization from the moment of inclusion to the fixed solution takes about 10 seconds. Long range Bluetooth 4.0 and more satellites tracked give better comfort in difficult measurement conditions. The receiver is also equipped with additional algorithms and calculation engines that level out the reflected signals.



The most important thing in all these specifications is how the receiver works in the field. The users of satellite RTK receivers are most interested in obtaining satisfactory centimeter accuracy when measuring in difficult conditions (such as at the border of a forest or building, or in excavations), so that the repeatability of measurements is within the range of 1-2 cm and that "reflected pickets" never appear. How to effectively check if the satellite receiver does not "cheat" us, measures correctly and the quality of measurements is at the highest level? When testing satellite equipment, it is best to take measurements in a difficult place. After measuring, turn off the receiver and initialize it again, and then measure the same point again. You can do it several times and compare the results. Also, make initialization under difficult measurement conditions and see how quickly you can get a fixed solution and centimeter accuracy. In good conditions, almost every receiver will measure correctly, and only in the more difficult ones can you see the advantage of the SL800 over competing devices. The receiver "defends itself" by how it works in the field. There's no need to tell how great it is and how much it can. It is through testing under difficult measurement conditions that you can judge for yourself how much truth there is in it. We assure you that the SL800 will not only meet your expectations, but will even surprise you with its quality of work.

The SL800 comes with the SHC30 Android recorder, an improved and more advanced version of the previous controller. Following the spirit of time and the possibilities offered by technological progress, together with SatLab SL800 (also with SatLab SLC) we offer a novelty - our field application for Android platform. Besides active background layers or raster allows to display OpenStreetMap layers, WMS layers or references stations layers. The program uses specially designed algorithms that also allow you



to calculate your position when moving faster, for example by driving a car or swimming a boat and taking measurements using the SatLab echo sounder. This ensures that there is no time-to-time displacement of coordinates, as is the case with some standard receivers and measurement programs. In this configuration, as a recorder, we offer smartphones and tablets that are resistant to falls and weather conditions and meet the IP68 dust and waterproofing standard. Thanks to strong parameters, large screens and built-in gyroscopes and magnetometers, these accessories allow for better use of the potential of the receiver and field software.

**We invite you to compare SatLab products with other receivers in the field and to test them in difficult conditions you have not been able to cope with so far. Any feedback will be welcomed to share with us here.**