

# GPS2 - 2cm Accuracy GNSS Receiver



## GPS2 - SPEEDBOX compatible GNSS receiver with up to 2cm positional accuracy

- Connect to existing SPEEDBOX systems to improve GPS robustness and positional accuracy
- Improve GPS accuracy with correction options:
  - Standalone accuracy = 2m positional
  - Standalone with WAAS = 70cm positional
  - RTK differential corrections over GSM or radio modem = 2cm positional
- GPS L1/L2, GLONASS, SBAS, QZSS, WAAS/EGNOS/MSAS
- 226 universal channel signals tracked
- Stacking case, fully compatible with SPEEDBOX MINI, DL2, POWER PACK 2 etc.



### Positional Correction Sources:

- Over radio modem from a basestation
- Over radio modem from a 3rd party modem, subject to it sending the required RTCM v3 messages
- Corrections over the GSM network from a remote connection (NTRIP) server. Built in GSM modem, just insert a sim card and set up the user name and password

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<b>Typical Position Accuracy (standalone)</b>	1-2m
<b>Typical Position Accuracy (differential)</b>	2-3cm
<b>Typical Speed Accuracy (standalone)</b>	0.02m/s
<b>Distance Accuracy</b>	2-3cm in 40m
<b>Correction format</b>	RTCM v3.x
<b>Update Rate</b>	20Hz
<b>Serial I/O</b>	3 x RS232 ports
<b>Serial 1</b>	RS232 @ 460800 baud - Outputs RT msg109 @ 20Hz
<b>Serial 2</b>	RS232 @ 115200 baud - Configuration / reflash
<b>Rear serial port ("Modem")</b>	RS232 @ 38400 baud - RTCM3 input/output
<b>USB</b>	115200 baud - Configuration / reflash
<b>CAN output</b>	GPS status, GPS time, LLH Position, NED velocity, 2D & 3D speed, GPS heading & gradient at up to 20Hz. Output latency either ASAP or fixed 150ms.
<b>SIM card format</b>	Mini-SIM (2FF)
<b>Voltage</b>	10-15V
<b>Power consumption</b>	3W
<b>Weight</b>	540g
<b>Dimensions</b>	163mm x 118mm x 34mm
<b>Antenna (standalone)</b>	GPS L1 + GLONASS L1, 3.3v, active
<b>Antenna (differential)</b>	GPS L1/L2 + GLONASS L1/L2, 3.3v, active

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