

SPEED-MASTER 22/GPRS

The **SpeedMaster** work similar to a speedometer at the bike, but he still offers much more functions. During the ride, the current speed, the put back stretch of way, the time, the heart rate and a few more values are displayed and recorded in the internal memory. The system has also a measuring system which can be started manually or automatically for the definition of the average speed for the sampling lengths of 100m, 250m and 500m.

Later all the data can evaluated with the Personal Computer software "**NavManager 3.0**". The Software allows an automatic timekeeping with ranking between a starting and finish line on the map, these lines can entered into the digital map by the user with a mouse click. The software offer further extensive report possibilities specially for windsurfing as number of the jibes, jibe speed, jumps, The put back ways are announced on the digital map together with the relation to speed and heart rate.

A nice feature is the possibility of the system to send the data on-line via GPRS (TCP over IP) for example 3,00 EUR/month to the PC at home or to the trainer. All actual data are send every 5 seconds (adjustable) directly to the PC and our software "**NavManager 3.0**" with integrated Socket Listener display the data onl-line on the screen. During competitions you can see the actual position, speed and heartrate up to 100 sportsmen simultaneously on the screen, parallel you can show it in the web.



Björn Dunkerbeck during the Speed World Cup 2006 in Fuerteventura

Technical Data:

GPS: receiver:	SIRF III
GPS: channels:	20
GPS: cold/warm/hotstart:	40 sec / 12 sec / 3 sec
GPS: antenna:	patch, active, integrated
GSM: frequency:	900 / 1800 / 1900 Mhz (tri-band)
GSM: data transmission:	GPRS / SMS / Data Call
GSM: protocol:	TCP over IP
GSM: SIM card:	data card (contract) or pre paid card
GSM: server settings:	adjustable, world wide, APN/DNS/PW/UW
Service interface:	RS-232, 19.200 Baud, 8 data bit, 1 stop bit
Service protocol:	ASCII or binary
Memory:	4 Mbit Flash (opt. 16 Mbit)
Sensor: heart rate:	Polar Transmitter, max. distance 1m, wireless
Sensor: acceleration:	two axis sensor, tilt and accelerat., 1...5g
Dimensions:	90mm x 50mm x 18mm (LxWxH)
Accumulator:	LION 3,8V/900mAh (opt. 1800mAh)
Working time (GPS&GPRS):	7 hours (opt. 14 hours)
Case:	glas fibre ABS
Weight:	approx. 160g
Working temperature:	-25 ... +70°C

Working Principle:

