Specifications StreamLine Nano

Data communication

GPRS/GSM Modem	Telit GE865 QUAD band	
Frequency	850 / 900 / 1800 /1900 MHz	
RF Power	Class 4 (2W) @ 850 / 900 MHz Class 1 (1W) @ 1800 /1900 MHz	
Sensitivity	850/900 MHz 1800/1900 MHz	-107 dBm (typical) -106 dBm (typical)
Data	GPRS	Class 10
	Coding schemes	CS1 to CS4
SMS	Point-to-Point mobile originated & mobile terminated	
	Cell Broadcast	

Navigation

GPS Receiver	65 channel Venus634LPx	
Frequency	L1 1574.42 MHz	
Acquisition Time (TTFF)	Hot start	< 1 sec
	Cold start	29 sec
Position Accuracy	2.5 meter (CEP) 2 meter (CEP with WAAS, EGNOS)	
Sensitivity	Cold start	-148 dBm
	Reacquisition	-155 dBm
	Tracking	-161 dBm
Antenna	Passive patch antenna 20x20 mm	

Electrical

Charging Voltage	Maximum range: +4.3…+10 VDC Preferred power supply for charging: 5V+-10%, 500mA or up.
Charging Current	Max 450mA. Higher charging currents (for batteries with higher capacity) on request.
Power Consumption	500µW standby (typical): GPS off, hot start possible. GSM off. Processor monitors timer + pushbutton + vibration sensor. No accel sensor. Maximum standby time with 550mAh battery: ~ 5 months. 175 mW tracking: GPS always on, gprs active, gprs session open. Approx. 9 W peak during data transmission. Tracking time with GPS full power + 1 update via gprs per 15 minutes: ~12 hours. Power consumption depends on amount of GPRS traffic and navigation parameters

External Connections StreamLine Nano (MICRO-USB)

Pin	Signal	Type	Description
1	USB VCC	VCC	+4.5…+10VDC Charge input
2	Serial IN	I	Serial input or digital input (2..31V for active high), ~ 50K pulldown
3	Serial OUT	O	Serial or digital output, open collector (max 31V / 10 mA / 100mW)
4	N/C	-	
5	GND	GND	GND for charge and I/O

Comparison table StreamLine

	StreamLine Rev8-B / TM171	StreamLine Nano
Introduction date	May-2009	May-2010
Outside Dimensions	100 x 67 x 20 mm Aluminum housing	68 x 32 x 17 mm ABS housing
GPRS / SMS		
QUADBAND 850/900/ 1800/1900 Mhz	•	•
Antenna connection	SMA or micro-coax	micro-coax
GPRS antenna included	• / optional	•
GPS		
Tracking sensitivity / channels	-161 dBm / 65 ch	-161 dBm / 65 ch
Antenna sensing circuitry	•	-
Antenna connection	SMA / microcoax / Onboard	Onboard patch
GPS antenna included	• / optional	•
POWER		
Internal Backup battery	Li-Polymer 550-2400 mAh (optional)	Li-Polymer 550mAh
Average tracking power (GPS full power, GPRS connected)	200 mW	175 mW
Minimum power consumption	<5 mW at 6..31V / <0.1mW at 4..9V (optional Alkaline version)	<0.5 mW (internal battery)
Power cable + fuse included	• / optional	-
IN / OUT		
Connector	8 pins / 4 + 24 pins	Micro-usb
Digital / Analog Inputs	3 / 5	1 (digital) =IN5
Digital outputs (max. 31 Volt)	2 / 4	1
Camera interface	- / •	-
RS-232 connections	- / •	-
3V serial connections	1 combined RXD-TXD / 4	1 RXD+TXD
1-Wire / iButton interface	•	-
Handsfree audio	-	Microphone + 8 Ohm speaker amplifier (optional)
MISCELLANEOUS		
Internal 3 axis acceleration / G-force sensor	optional	optional
Internal Vibration sensor	• / optional	•
Settings/Source files	Uses flash/ max. 100.000 writes	Uses flash/ max. 100.000 writes
Maximum items in log	6,000/ 55,000 (optional) / 500,000+ (optional)	6,000/ 55,000 (optional)

WARNING:

- The device should be turned off in vicinity of petrol pumps, chemical, flammable or hazardous environments where ignition of flammable atmospheres is possible.

- The GSM unit and antenna shall be operated at a distance greater than 20 cm from the human body.