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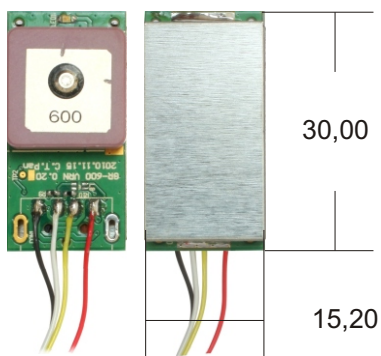


# Specification

## 60423

Navilock industry GPS Engine Module NL-622EUSB

EAN: 4043619604234

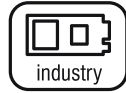


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**Edition: 08/2011**



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### Overview

NL-622EUSB is an easy to use, ultra-high performance GPS smart antenna module. It equips with the u-blox 6 -160dBm engine and support USB interface.

The built-in rechargeable backup power allows for faster position fixing.

Our experienced design provides not only fast acquisition and excellent tracking performance but also quality and delivery assurance.

### Features

- Easy to use with built-in patch antenna, rechargeable backup power
- Excellent EMI protection and minimum RF efforts
- High performance: -160dBm tracking sensitivity
- A-GPS support, OMA SUPL/3GPP TS25.171 (GSM/UMTS) compliant
- SBAS (WAAS, EGNOS, MSAS, GAGAN) support
- Industrial operating temperature range: -40 ~ 85°C



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### Technical specifications

Receiver performance data

Receiver Type	u-blox 6, 50-channel, L1 frequency, C/A code
Horizontal Position Accuracy	< 2.5m (Autonomous) < 2.0m (WAAS) (CEP, 50%, 24-hour static, -130dBm, SEP < 3.5m )
Velocity Accuracy	<0.1 m/s (speed) <0.5° (heading) (50% @ 30 m/s)
Time To First Fix	Autonomous (All at -130dBm)
Hot start	1sec
Warm start	32sec
Cold start	32sec
Sensitivity	-146dBm (acquisition) (Autonomous) -160dBm (tracking & navigation)
Max. Update Rate	1-5Hz
Max. Altitude	< 50.000 m
Max. Velocity	< 1.800 km/hr
Protocol Support	NMEA 0183 v2.3 (compatible to 3.0) UART: 9600, 38400bps N,8,1; GGA, GLL, GSA, GSV, RMC, VTG, TXT
SBAS Support	WAAS, EGNOS, MSAS, GAGAN
Dynamics	< 4g



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### Electrical data

Power Supply	3,5 ~ 5,5 V
Power Consumption	50 mA / average tracking

### RF interface

Built-in path antenna	15 x 15 x 4 mm
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### Environmental data

Operating temperature	-40 ~ 85°C except battery: -10~60°C
Storage temperature	-40 ~ 85°C except battery: -10~60°C

### Mechanical data

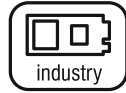
Dimension	15 (W) x 30 (L) x 8 (H) mm
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### 4-pin Interface

Pin	Name	Function	I/O
1	VCC	3.3 ~ 6 V power supply	Input
2	DM	USB negative	I/O
3	DP	USB positive	I/O
4	GND	Ground	Input

### On-board LED

The GPS fix status is indicated by an on-board LED.  
LED always ON: not fixed; LED blinks: position fixed



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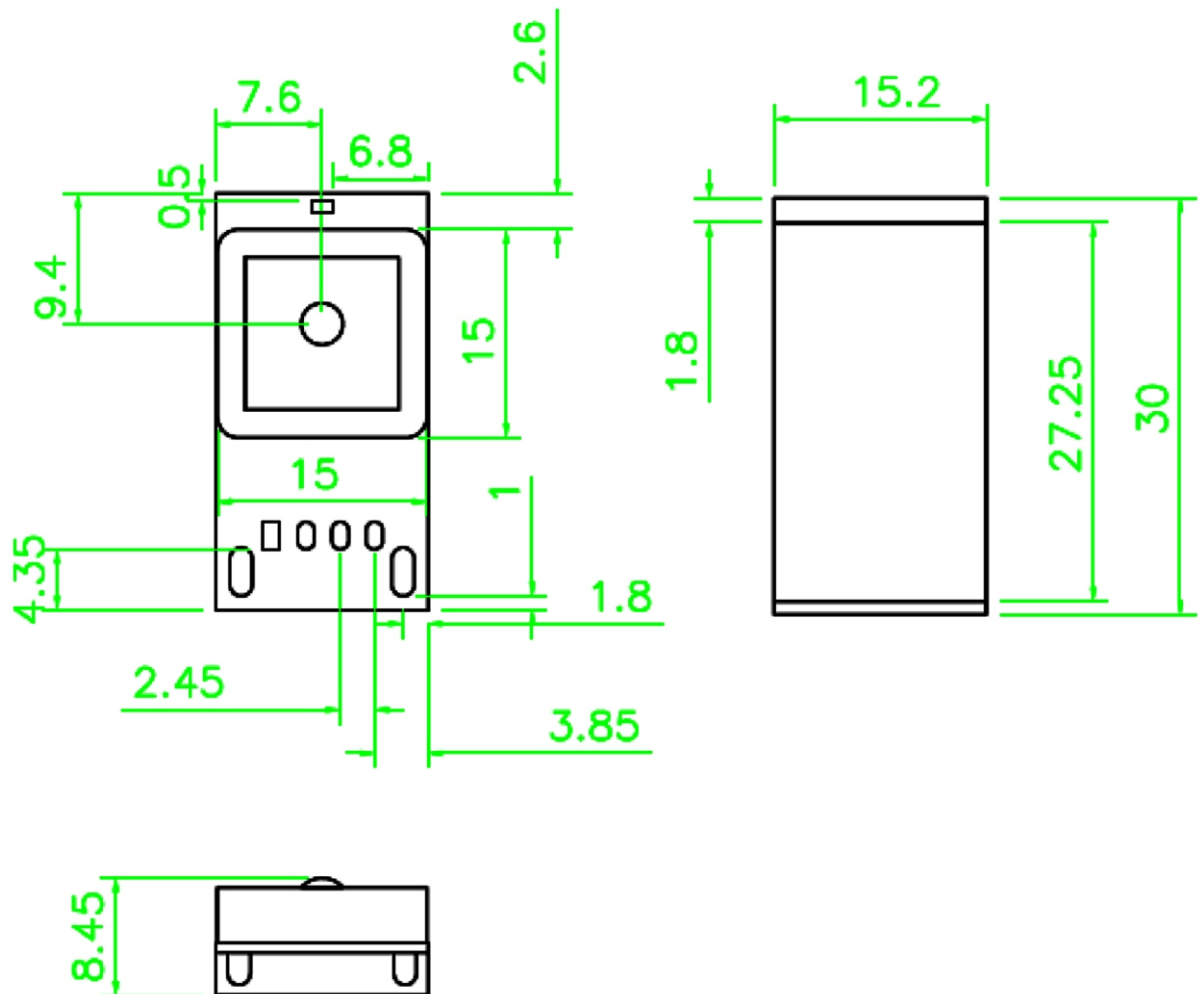
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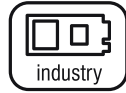
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### Mechanical drawing





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If you have further questions, please contact our customer support  
[support@navilock.de](mailto:support@navilock.de).

You can find current product information on our homepage: [www.navilock.com](http://www.navilock.com).

### **Final clause**

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