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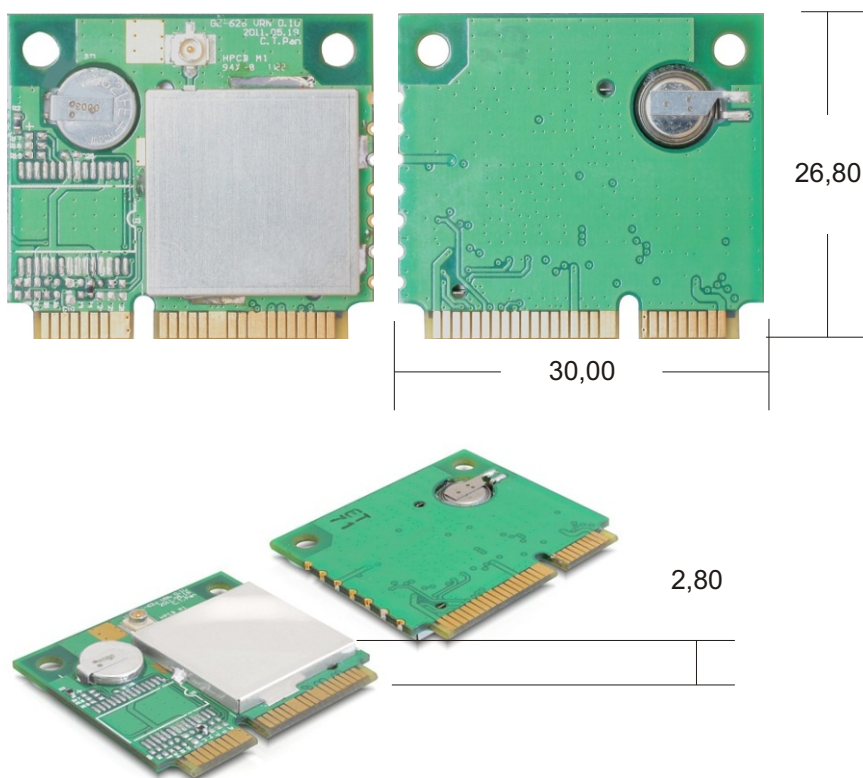


Specification

95925

Navilock industry MiniPCle GPS TTL 9600 module

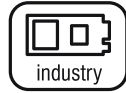
EAN: 4043619959259



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Navilock industry MiniPCIe GPS TTL 9600 module

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Overview

95925 is equipped with the **u-blox 6** high-sensitivity engine, RF connector, and optional backup battery. The Mini PCI Express standard design allows it to be easily applied in devices with PC architecture. The half-length design allows it to be used in dimension demanding environment. It supports UART/TTL interface. The backup battery allows faster position fix and it is optional in case extended temperature range is required.

Features

- PCI Express Mini Card standard compliant
- Built-in RF connector, reduce RF tuning efforts
- The tiny I-PEX RF connector allows flexibly placing GPS antenna at a suitable location.
- External active antenna short circuit protection
- Optional backup battery for faster position fix.
- Support UART/TTL interface.
- High sensitivity+/-160dBm tracking/-146dBm



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Technical specifications

Receiver performance data

Receiver Type	u-blox 6 UBX-G6010-ST, 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 Pulse	30ns (RMS)
Signal Accuracy	<60 ns (99%)
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	5Hz
Max. Altitude	< 50.000 m
Max. Velocity	< 1.800 km/hr
Protocol Support	NMEA 0183 v2.3 (compatible to 3.0) UART: 9600 bps 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	3,3 +- 0,3 V
Power Consumption	50 mA / average tracking

RF interface

Connector	I-PEX
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Environmental data

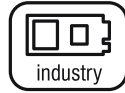
Operating temperature	-20 ~ 60°C (without battery -40 ~ 85°C)
Storage temperature	-20 ~ 60°C (without battery -40 ~ 85°C)

Mechanical data

Dimension	30 (W) x 26,8 (L) x 2,8 (H) mm
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Pin Interface

Pin	Pins	Function	I/O
VCC	2, 24, 39, 41, 52	3,0 ~ 3,6 V	Input
GND	4, 9, 15, 18, 21, 26, 27, 29, 34, 35, 37, 40, 43, 50	Ground	Input
RXD	45	TTL input into GPS	Input
TXD	47	TTL output from GPS	Output
LED	42	GPS fix indication	Output
nRESET	5	RESET pin	Input
NC	Remaining pins	No connection	-



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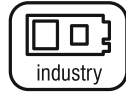
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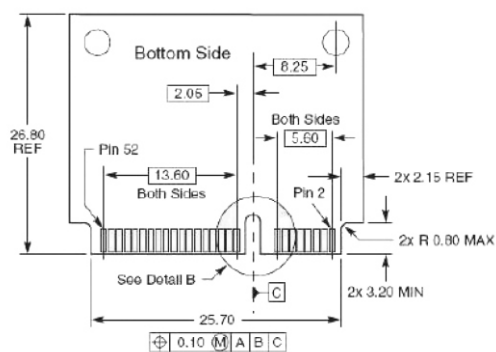
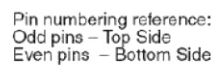
Pin assignment

1	NC	VCC	2	1	NC	VCC	2
3	NC	GND	4	3	NC	GND	4
5	nRESET	NC	6	5	nRESET	NC	6
7	NC	NC	8	7	NC	NC	8
9	GND	NC	10	9	GND	NC	10
11	NC	NC	12	11	NC	NC	12
13	NC	NC	14	13	NC	NC	14
15	GND	NC	16	15	GND	NC	16
17	NC	GND	18	17	NC	GND	18
19	NC	NC	20	19	NC	NC	20
21	GND	NC	22	21	GND	NC	22
23	NC	VCC	24	23	NC	VCC	24
25	NC	GND	26	25	NC	GND	26
27	GND	NC	28	27	GND	NC	28
29	GND	NC	30	29	GND	NC	30
31	NC	NC	32	31	NC	NC	32
33	NC	GND	34	33	NC	GND	34
35	GND	USB_DM	36	35	GND	NC	36
37	GND	USB_DP	38	37	GND	NC	38
39	VCC	GND	40	39	VCC	GND	40
41	VCC	LED	42	41	VCC	LED	42
43	GND	NC	44	43	GND	NC	44
45	NC	NC	46	45	RXD	NC	46
47	NC	NC	48	47	TXD	NC	48
49	NC	GND	50	49	NC	GND	50
51	NC	VCC	52	51	NC	VCC	52

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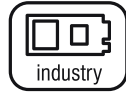
Navilock industry MiniPCle GPS TTL 9600 module

Mechanical drawing





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Support Navilock

If you have further questions, please contact our customer support
support@navilock.de.

You can find current product information on our homepage: www.navilock.com.

Final clause

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