Commercial GPS test

Two commercial gps were tested.

# Mini GT03s



## Key facts

|  |  |
| --- | --- |
| **Pros** | **Cons** |
| Small, lightweight | Battery life is only 2 hr |
| Can record audio | Requires to be turn on manually after battery reaches 0 |
| [Cheap](https://www.aliexpress.com/item/4000079095532.html?spm=a2g0o.productlist.0.0.382a39a3snzxig&algo_pvid=64e2a2f3-3e3d-4b77-8438-ce7e30994d6e&algo_expid=64e2a2f3-3e3d-4b77-8438-ce7e30994d6e-6&btsid=0be3764515899627615122967e8177&ws_ab_test=searchweb0_0,searchweb201602_,searchweb201603_) (140kr + 56kr shipping) | No motion sensing mode or sleep |
|  |  |
|  |  |

## Operation costs

Test was done using Hologram.io global SIM

|  |  |
| --- | --- |
| Min daily usage | Max daily usage |
| 300 KB | 639 KB |

|  |  |
| --- | --- |
| Min monthly usage | Max monthly usage |
| 9300 KB | 19809 KB |

With less than 100 devices, the price is: 1.5 USD + 0.4/MB so:

|  |  |
| --- | --- |
| Min monthly | Max monthly |
| 5.22 USD | 9.42 USD |
| 52 NOK | 94 NOK |

Yearly, this represents:

|  |  |
| --- | --- |
| Min yearly | Max yearly |
| 621.72 NOK | 1122.96 NOK |

## Operation details

The unit uses a binary encoded data package. (i.e. in traccar needs port 5023 to work). The configuration is done with the following parameters (1 per line):

1122

APN#hologram##

SERVER#<traccar\_ip>#5023#

time#1

6666#on#

heartbeat#900#

sysrst

# ST-901

# 

## Key facts

|  |  |
| --- | --- |
| **Pros** | **Cons** |
| Directly connected to 12V | No motion sensing mode or sleep |
| Detects engine activity via ACC line | Requires the cable to be changed |
| [Cheap](https://www.aliexpress.com/item/33054417731.html?spm=a2g0o.productlist.0.0.47457d70wmDU7B&algo_pvid=92b47a83-0928-4071-ae77-47f774e294d1&algo_expid=92b47a83-0928-4071-ae77-47f774e294d1-52&btsid=0ab6d69f15899812151527976e2d44&ws_ab_test=searchweb0_0,searchweb201602_,searchweb201603_) (165kr + 38kr shipping) |  |
| Waterproof |  |
|  |  |

## Operation costs

Test was done using Hologram.io global SIM

|  |  |  |
| --- | --- | --- |
| Min daily usage (ACC off, report every 10 mins) | Max daily usage (ACC on, report every 1 min) | Normal daily average (8 HR trips) |
| 393 KB | 460 KB | 420 KB |

|  |  |  |
| --- | --- | --- |
| Min monthly | Max monthly | Normal monthly average (8 HR trips/day) |
| 12183 KB | 14260 | 13020 KB |

With less than 100 devices, the price is: 1.5 USD + 0.4/MB so:

|  |  |
| --- | --- |
| Min monthly | Max monthly |
| 6.7 USD | 7.5 USD |
| 67 NOK | 75 NOK |

Yearly, this represents:

|  |  |
| --- | --- |
| Min yearly | Max yearly |
| 804 NOK | 900 NOK |

## Operation details

The unit uses a binary encoded data package. (i.e. in traccar needs port 5023 to work). The configuration is done with the following parameters (1 per line):

8030000 hologram

8040000 <traccar\_ip> 5013

8050000 60

Example cost

Example installation for a camp of 10 vessels

# Preparation

Cost for hardware 2030 kr + 25% VAT

3d printed cases 580 kr (2 KG of plastic)

Cable 469 kr (50M of thick cable in biltema)

Sim cards $45 USD, 450 kr

**Total 3529 kr**

# Setup

2 SMS per device 0.19 USD, **38 kr total**

# Operation

## Monthly/worse scenario (30-60 sec report)

Data package 250 MB, 62.5 USD

Device operation, 15 USD

**Total 775 kr**

# All combined

Preparation and one time setup, **3567 kr total**

Operation, **9300 kr total**

**1287 kr per device (hardware, setup, operation for the year)**

Traccar

System used for the tests





