NanoSense
GPS Kits

Datasheet

Kit with GPS module and antenna for NanoDocks ADCS

GomSpace A/S | Langagervej 6 | DK-9220 Aalborg East | Denmark
gomspace.com | sales@gomspace.com | T: +45 71 741 741

1 Table of Contents

© 2018 GomSpace A/S

2 Overview

GomSpace offers two GPS kits designed for mounting on NanoDock ADCS-3 and -6. Each GPS kit contains a NovAtel GPS module and an GPS antenna.

The datasheet and manuals for the GPS module and antennas can be found here:

GPS:
http://docs.novatel.com/OEM7/Content/Technical_Specs_Receiver/OEM719_Specifications.htm

Antennas:
http://www.inventeksys.com/products-page/gps-antennas/actpat154-01-ip-gps-antenna/
http://www.tallysman.com/wp-content/uploads/TW1421_Datasheet_Rev3_8-1.pdf

3 Main Features of GPS Module

- Precision, position: 1.5 m
- Precision, velocity: 0.03 m/s
- Power: 3.3 V and <400 mA
- COCOM limit removed
- Mass: 31 g
- Size: 46 x 72 x 11 mm

4 Kits

The GPS kit comes in two different versions.

	NanoSense GPS Kit-3	**NanoSense GPS Kit-6**
GPS Module	NovAtel OEM719	NovAtel OEM719
Antenna	Inventek ACTPAT154-01-IP	Tallysman TW1421
Antenna cable length	35 cm	35 cm
Antenna cable connector direction	Straight	Straight
Misc.	Antenna mounting block	PCB mounting rails
Antenna mounting	With glue	Has four holes for screws
Compatible with	NanoDock ADCS-3	NanoDock ADCS-6
Collective Mass	43.5 g	56 g

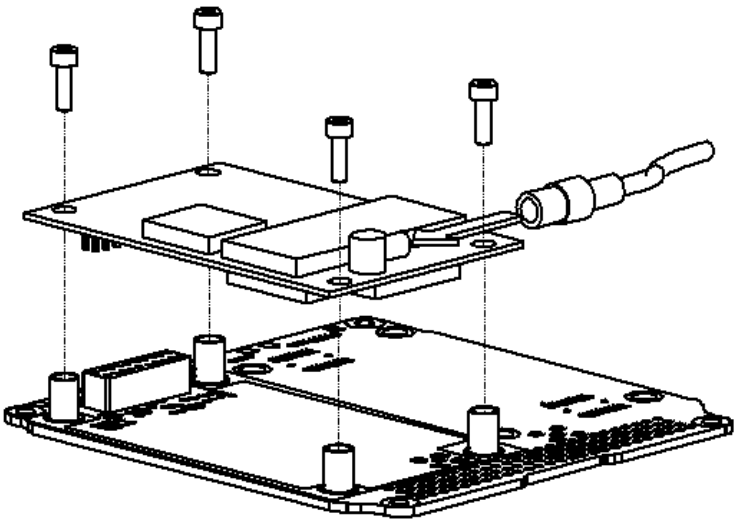
© 2018 GomSpace A/S

5

5 Mounting

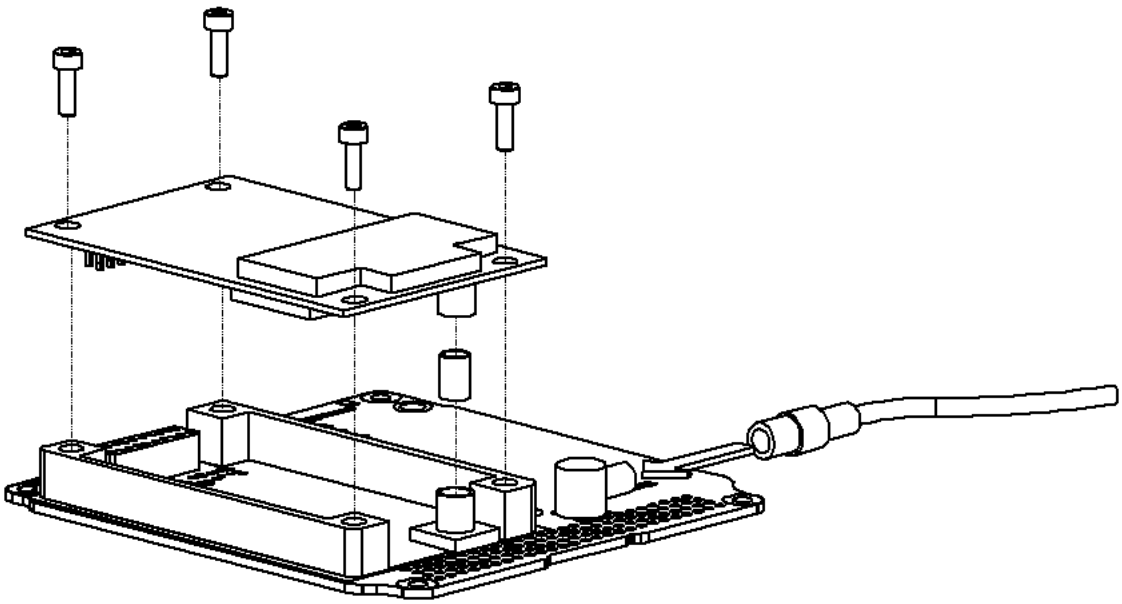
5.1 GPS Kit-3

The GPS Kit-3 is mounted on top the NanoDock ADCS-3 with the antenna connector on the top.



5.2 GPS Kit-6

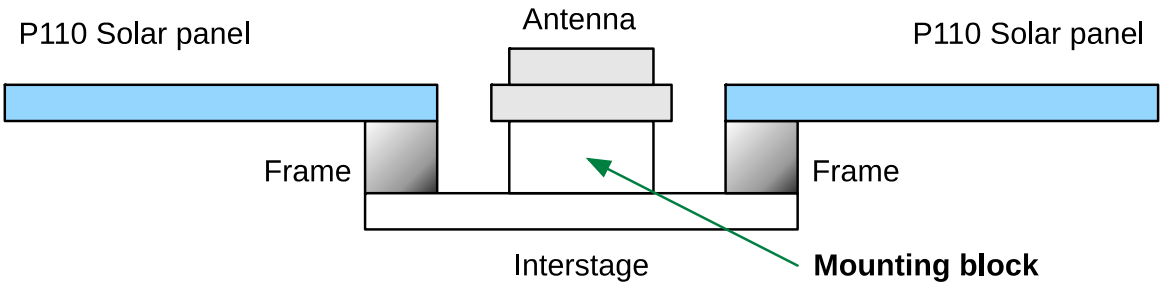
The GPS Kit-6 uses a small MMBX plug to connect the NanoDock ADCS-6 with the GPS PCB.



© 2018 GomSpace A/S

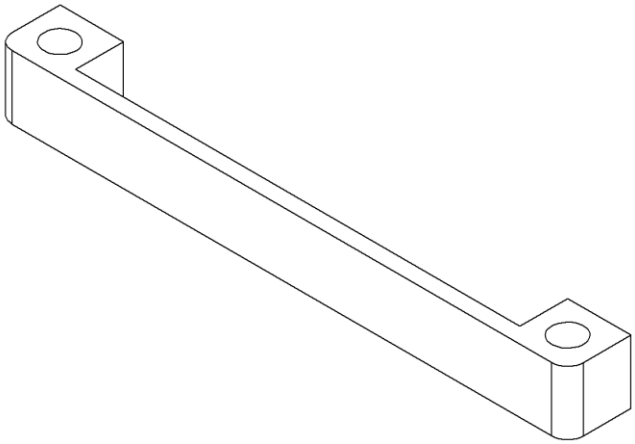
6 Mounting Block

On the GPS Kit-3 Inventek antenna is glued a small mounting block, which is used to raise the antenna up from the Interstage, to get a clear line of sight. View the illustration below.



7 Rails

The GPS Kit-6 comes with two rails which the GPS PCB is mounted upon, to prevent the antenna connector getting loose due to vibrations.



8 Disclaimer

The information in this document is subject to change without notice and should not be construed as a commitment by GomSpace. GomSpace assumes no responsibility for any errors that may appear in this document.

In no event shall GomSpace be liable for incidental or consequential damages arising from use of this document or the software and hardware described in this document.

© 2018 GomSpace A/S