

# GeoMax Zenith15/25 Pro Series





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EN

DE

ES

FR

IT

PT-BR

RU

NL



# GeoMax Zenith15/25 Pro Series



# 1 Important Information about your Instrument

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Read and follow the User Manual on the accompanying data storage device before using the product.

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Keep for future reference!

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## Intended use

- Computing with software.
  - Recording measurements.
  - Carrying out measurement tasks using various GNSS measuring techniques.
  - Recording GNSS and point related data.
  - Remote control of product.
  - Data communication with external appliances.
  - Measuring raw data and computing coordinates using carrier phase and code signal from GNSS satellites.
-



The product must not be disposed with household waste.

### Conformity to national regulations

- FCC Part 15 (applicable in US)
- Hereby, GeoMax AG, declares that the radio equipment type Zenith15/25 Pro is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EC and other applicable European Directives. The declaration of conformity can be consulted at <http://www.geomax-positioning.de/Downloads.htm>.
- This Class 2 equipment may be operated in: AT, BE, BG, CA, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MT, NL, NO, PL, PT, RU, RO, SE, SI, SK, US.

- CE Class 2 equipment according European Directive 2014/53/EC (RED) for which following EEA Member States apply restrictions on the placing on the market or on the putting into service or require authorisation for use:
- France
  - Italy
  - Norway (if used in the geographical area within a radius of 20 km from the centre of Ny-Ålesund)
- The conformity for countries with other national regulations not covered by the FCC part 15 or European directive 2014/53/EC has to be approved prior to use and operation.
  - Japanese Radio Law and Japanese Telecommunications Business Law Compliance.
    - This device is granted pursuant to the Japanese Radio Law (電波法) and the Japanese Telecommunications Business Law (電気通信事業法).
    - This device should not be modified (otherwise the granted designation number will become invalid).



## Dangerous Goods Regulations

The products of GeoMax are powered by Lithium batteries.

Lithium batteries can be dangerous under certain conditions and can pose a safety hazard. In certain conditions, Lithium batteries can overheat and ignite.



When carrying or shipping your GeoMax product with Lithium batteries onboard a commercial aircraft, you must do so in accordance with the **IATA Dangerous Goods Regulations**.



GeoMax has developed **Guidelines** on “How to carry GeoMax products” and “How to ship GeoMax products” with Lithium batteries. Before any transportation of a GeoMax product, we ask you to consult these guidelines on our web page (<http://www.geomax-positioning.com/dgr>) to ensure that you are in accordance with the IATA Dangerous Goods Regulations and that the GeoMax products can be transported correctly.



Damaged or defective batteries are prohibited from being carried or transported onboard any aircraft. Therefore, ensure that the condition of any battery is safe for transportation.

## 2



## Instrument Components

### Zenith15/25 Pro components




- a TNC-connector for external UHF antenna, only for models with UHF radio
- b Battery compartment with microSD and SIM card slot
- c Keyboard with LEDs, ON/OFF button and Function button
- d Serial, USB and power port
- e Antenna Reference Plane (ARP) is where the instrument heights are measured to

**ON/OFF button**

Button	Function
ON/OFF	 <p>If Zenith15/25 Pro is off: Turns on Zenith15/25 Pro when held for 2 s.</p> <p> While the Zenith15/25 Pro is booting the two Power LEDs flash.</p>
	<p>If Zenith15/25 Pro is already on: Turns off Zenith15/25 Pro when held for 2 s.</p>

**Function button**

All functions described assume the Zenith15/25 Pro is already on.

Button	Function
Function	 <p>Press and hold button for &lt;1 s.</p>

Button	Function
	<p>Switches the Zenith15/25 Pro between rover or base mode.</p>
	<p>Press and hold button for 3 s.</p>
	<p>Updates the base position coordinates when Zenith15/25 Pro is in base mode. The RTK base LED flashes for 2 s. When no position is available, the LED flashes red.</p>
	<p>Press and hold button for 5 s.</p>
	<p>Connects to the configured RTK base station or NTRIP server when the Zenith15/25 Pro is in rover mode. The RTK rover LED flashes for 2 s. No action if a rover mode is not configured.</p>

## 3 Environmental specifications

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### Environmental specifications

#### Temperatures (°C):

Instrument:	-40 to +65 (operation)	-40 to +80 (storage)
ZBA201 battery:	-20 to +55 (operation)	-40 to +70 (storage)

#### Protection:

IP68 (IEC 60529)

#### Vibration:

Vibration test according to ISO 9022-36-05

**Shock:**

Withstands a 2 m (6.6 ft) pole topple over onto hard surface.

**Humidity:**

100% condensing

The effects of condensation are to be effectively counteracted by periodically drying out the instrument.

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## 4 Transport

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### Transport in the field

When transporting the equipment in the field, always make sure that you

- either carry the product in its original container,
  - or carry the tripod with its legs splayed across your shoulder, keeping the attached product upright.
- 

### Transport in a road vehicle

Never carry the product loose in a road vehicle, as it can be affected by shock and vibration. Always carry the product in its container and secure it.

For products for which no container is available use the original packaging or its equivalent.

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### Shipping

When transporting the product by rail, air or sea, always use the complete original GeoMax packaging, transport container and cardboard box, or its equivalent, to protect against shock and vibration.

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**Shipping, transport of batteries**

When transporting or shipping batteries, the person responsible for the product must ensure that the applicable national and international rules and regulations are observed. Before transportation or shipping, contact your local passenger or freight transport company.

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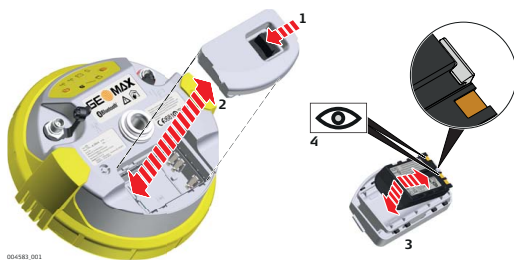
## 5

# Operation



The battery must be charged before using it for the first time.

### Change battery step-by-step

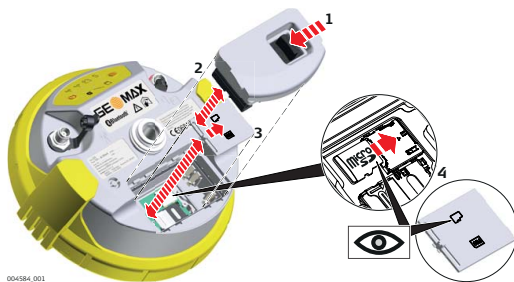




The battery is inserted in the bottom part of the instrument.

1. Push the slide fastener of the battery compartment in the direction of the arrow with the open-lock symbol.
2. Remove the cover from the battery compartment.
3. With the battery contacts facing upwards, slide the battery into the cover of the battery compartment.
4. Push the battery downwards so that it locks into position.
5. Insert the cover of the battery compartment into the compartment and push the slide fastener in the direction of the arrow with the close-lock symbol.
6. To remove a battery, push the slide fastener of the battery compartment in the direction of the arrow with the open-lock symbol and remove the cover.
7. Push the battery slightly upwards and at the same time pull out the bottom part of the battery. This releases the battery from its fixed position.
8. Remove the battery.

## Insert a microSD card step-by-step



004584.001



Removing the microSD card while the instrument is turned on can cause loss of data. Only remove the microSD card or unplug connecting cables when the instrument is switched off.



The microSD card is inserted into a slot inside the battery compartment of the instrument.

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1. Push the slide fastener of the battery compartment in the direction of the arrow with the open-lock symbol.

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  2. Remove the cover from the battery compartment.

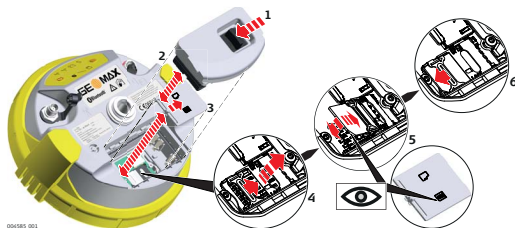
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  3. Press the latch of the SIM/microSD card cover and remove the cover.

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  4. Slide the microSD card with the logo facing upwards firmly into the slot until it clicks into position.
-

## Inserting a SIM card step-by-step



✎ Inserting/removing the SIM card while the Zenith15/25 Pro is turned on can result in permanent damage to the card. Only insert/remove the SIM card when the Zenith15/25 Pro is switched off.

✎ The SIM card is inserted into a slot inside the battery compartment.

1. Push the slide fastener of the battery compartment in the direction of the arrow with the open-lock symbol.

---
2. Remove the cover from battery compartment.

---
3. Press the latch of the SIM/microSD card cover and remove the cover.

---
4. Push the SIM card holder in the direction of the OPEN arrow and flip it up.

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5. Place the SIM card into the SIM card holder, the chip facing the connectors inside the slot - as shown on the SIM/microSD card cover.  
Press the SIM card holder down.

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6. Push the SIM card holder in the direction of the LOCK arrow to close.

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**GeoMax AG**  
[www.geomax-positioning.com](http://www.geomax-positioning.com)



# GeoMax Zenith15/25 Pro Serie



# 1 Wichtige Informationen über Ihr Instrument

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Lesen und befolgen Sie die Gebrauchsanweisung auf dem beigelegten Datenträger, bevor Sie das Produkt verwenden.

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Sorgfältig aufbewahren!

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## Verwendungszweck

- Berechnung mit Software.
  - Aufzeichnen der Messungen.
  - Durchführung von Messaufgaben mit verschiedenen GNSS Messtechniken.
  - Aufzeichnung von GNSS und punktbezogenen Daten.
  - Fernbedienung des Produkts.
  - Datenkommunikation zu externen Geräten.
  - Messung von Rohdaten und Berechnen von Koordinaten mit Hilfe von Trägerphase und Codesignalen von GNSS Satelliten.
-



Das Produkt darf nicht im Hausmüll entsorgt werden.

### **Konformität mit nationalen Vorschriften**

- FCC Teil 15 (gültig in den USA)
- Hiermit erklärt GeoMax AG, dass die Funkausrüstung des Typs Zenith15/25 Pro den grundlegenden Anforderungen und anderen wichtigen Bestimmungen der Richtlinie 2014/53/EG und anderer anwendbarer Europäischer Richtlinien entspricht. Die Konformitäts-erklärung kann unter <http://www.geomax-positioning.de/Downloads.htm> eingesehen werden.
- Dieses Gerät der Klasse 2 kann in folgenden Ländern verwendet werden: AT, BE, BG, CA, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MT, NL, NO, PL, PT, RU, RO, SE, SI, SK, US.



- In folgenden Mitgliedsstaaten des EWR gelten für Geräte der Klasse 2 entsprechend der Europäischen Richtlinie 2014/53/EG (RED) Einschränkungen bei der Vermarktung oder bei der Inbetriebnahme oder es wird eine Genehmigung für den Betrieb benötigt:
- Frankreich
  - Italien
  - Norwegen (bei Verwendung innerhalb eines Radius von 20 km um das Zentrum von Ny-Ålesund)
- In Ländern mit nationalen Vorschriften, die nicht durch die europäische Richtlinie 2014/53/EG oder FCC Teil 15 abgedeckt sind, sind die Bestimmungen und Zulassungen für den Betrieb zu prüfen.
  - Einhaltung des japanischen Fernmeldegesetzes.
    - Dieses Gerät ist gemäß den japanischen Funk- und Fernmeldegesetzen (電波法 und 電気通信事業法) zugelassen.
    - Dieses Gerät sollte nicht verändert werden (andernfalls wird die vergebene Zulassungsnummer ungültig).

## Dangerous Goods Regulations

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DE

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When carrying or shipping your GeoMax product with Lithium batteries onboard a commercial aircraft, you must do so in accordance with the **IATA Dangerous Goods Regulations**.



GeoMax has developed **Guidelines** on “How to carry GeoMax products” and “How to ship GeoMax products” with Lithium batteries. Before any transportation of a GeoMax product, we ask you to consult these guidelines on our web page (<http://www.geomax-positioning.com/dgr>) to ensure that you are in accordance with the IATA Dangerous Goods Regulations and that the GeoMax products can be transported correctly.



Damaged or defective batteries are prohibited from being carried or transported onboard any aircraft. Therefore, ensure that the condition of any battery is safe for transportation.

## 2



## Instrumentenkomponenten

### Zenith15/25 Pro components



- a TNC-connector for external UHF antenna, only for models with UHF radio
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- e Antenna Reference Plane (ARP) is where the instrument heights are measured to


## ON/OFF button

Button	Function
ON/OFF	 <p>If Zenith15/25 Pro is off: Turns on Zenith15/25 Pro when held for 2 s.</p> <p> While the Zenith15/25 Pro is booting the two Power LEDs flash.</p>
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## Function button



All functions described assume the Zenith15/25 Pro is already on.

Button	Function
Function	 <p>Press and hold button for &lt;1 s.</p>

Button	Function
	<p>Switches the Zenith15/25 Pro between rover or base mode.</p> <p>Press and hold button for 3 s.</p> <p>Updates the base position coordinates when Zenith15/25 Pro is in base mode. The RTK base LED flashes for 2 s. When no position is available, the LED flashes red.</p> <p>Press and hold button for 5 s.</p> <p>Connects to the configured RTK base station or NTRIP server when the Zenith15/25 Pro is in rover mode. The RTK rover LED flashes for 2 s. No action if a rover mode is not configured.</p>



### 3

## Umweltspezifikationen

### Umweltspezifikationen

#### Temperaturen (°C):

Instrument:	-40 bis +65 (Betrieb)	-40 bis +80 (Lagerung)
ZBA201 Batterie:	-20 bis +55 (Betrieb)	-40 bis +70 (Lagerung)

#### Schutz:

IP68 (IEC 60529)

#### Vibration:

Vibrationstest entsprechend ISO 9022-36-05

**Schlag:**

Hält Umkippen aus 2 m (6.6 ft) Höhe am Lotstock auf harte Oberflächen stand.

**Feuchtigkeit:**

100% Kondensation

Den Auswirkungen von Kondensation sollte durch periodisches Austrocknen des Instrumentes entgegengewirkt werden.

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## 4 **Transport**

### **Transport im Feld**

Achten Sie beim Transport Ihrer Ausrüstung im Feld immer darauf, dass Sie

- das Produkt entweder im Originalbehälter transportieren,
- oder das Stativ mit aufgesetztem und angeschraubtem Produkt aufrecht zwischen den Stativbeinen über der Schulter tragen.

### **Transport in a road vehicle**

Never carry the product loose in a road vehicle, as it can be affected by shock and vibration. Always carry the product in its container and secure it.

For products for which no container is available use the original packaging or its equivalent.

### **Versand**

Verwenden Sie beim Versand per Bahn, Flugzeug oder Schiff immer die komplette GeoMax Originalverpackung mit Transportbehälter und Versand-

karton, bzw. entsprechende Verpackungen. Die Verpackung sichert das Produkt gegen Schläge und Vibrationen.

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**Versand bzw.  
Transport von  
Batterien /  
Akkus**

Beim Transport oder Versand von Batterien / Akkus hat der Betreiber sicherzustellen, dass die entsprechenden nationalen und internationalen Gesetze und Bestimmungen beachtet werden. Kontaktieren Sie vor dem Transport oder Versand Ihr lokales Personen- oder Frachttransportunternehmen.

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# 5

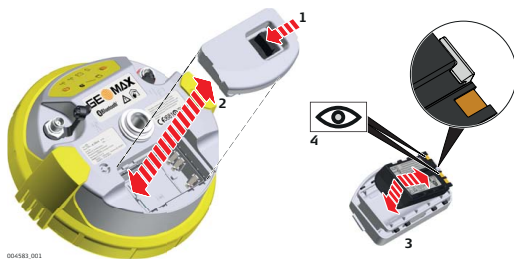
## Bedienung

DE



Die Batterie muss vor der Erstverwendung geladen werden.

### Change battery step-by-step

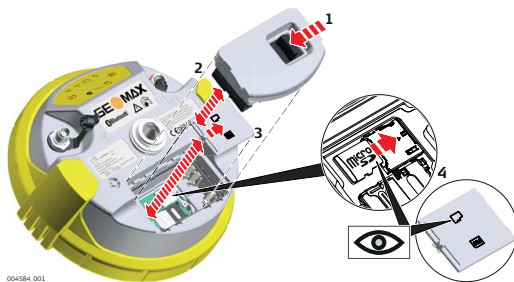




The battery is inserted in the bottom part of the instrument.

1. Push the slide fastener of the battery compartment in the direction of the arrow with the open-lock symbol.
2. Remove the cover from the battery compartment.
3. With the battery contacts facing upwards, slide the battery into the cover of the battery compartment.
4. Push the battery downwards so that it locks into position.
5. Insert the cover of the battery compartment into the compartment and push the slide fastener in the direction of the arrow with the close-lock symbol.
6. To remove a battery, push the slide fastener of the battery compartment in the direction of the arrow with the open-lock symbol and remove the cover.
7. Push the battery slightly upwards and at the same time pull out the bottom part of the battery. This releases the battery from its fixed position.
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## Insert a microSD card step-by-step



004584.001



Removing the microSD card while the instrument is turned on can cause loss of data. Only remove the microSD card or unplug connecting cables when the instrument is switched off.



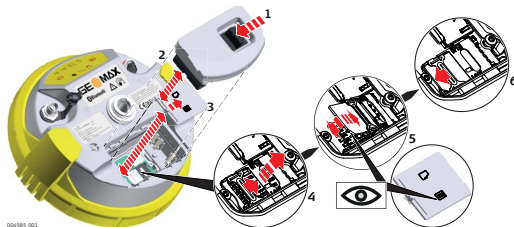
The microSD card is inserted into a slot inside the battery compartment of the instrument.

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1. Push the slide fastener of the battery compartment in the direction of the arrow with the open-lock symbol.
  2. Remove the cover from the battery compartment.
  3. Press the latch of the SIM/microSD card cover and remove the cover.
  4. Slide the microSD card with the logo facing upwards firmly into the slot until it clicks into position.
-



## Inserting a SIM card step-by-step



☞ Inserting/removing the SIM card while the Zenith15/25 Pro is turned on can result in permanent damage to the card. Only insert/remove the SIM card when the Zenith15/25 Pro is switched off.

☞ The SIM card is inserted into a slot inside the battery compartment.

1. Push the slide fastener of the battery compartment in the direction of the arrow with the open-lock symbol.

---

  2. Remove the cover from battery compartment.

---

  3. Press the latch of the SIM/microSD card cover and remove the cover.

---

  4. Push the SIM card holder in the direction of the OPEN arrow and flip it up.

---

  5. Place the SIM card into the SIM card holder, the chip facing the connectors inside the slot - as shown on the SIM/microSD card cover.  
Press the SIM card holder down.

---

  6. Push the SIM card holder in the direction of the LOCK arrow to close.
-





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# GeoMax Zenith15/25 Pro Series



# 1 Información importante de su instrumento



Antes de utilizar el producto, lea y siga las instrucciones del manual de uso que se encuentra en el dispositivo de almacenamiento de datos adjunto.



¡Conservar para futuras consultas!

## Utilización

- Cálculo con software.
- Registro de mediciones.
- Efectuar tareas de medición aplicando diversas técnicas de levantamiento GNSS.
- Registrar puntos GNSS y datos relacionados con los mismos.
- Control remoto del producto.
- Comunicación de datos con equipos externos.
- Registro de datos brutos y cálculo de coordenadas mediante fase portadora y señal de código de satélites GNSS.



No deseche el producto con la basura doméstica.

ES

### Conformidad con regulaciones nacionales

- FCC Parte 15 (aplicable en EE. UU.)
- Por el presente, GeoMax AG, declara que el tipo de equipo de radio del Zenith15/25 Pro cumple con los requerimientos básicos y otras disposiciones importantes de la Directiva 2014/53/EC y otras directivas europeas aplicables. La declaración de conformidad se puede consultar en <http://www.geomax-positioning.de/Downloads.htm>.
- Este equipo de Clase 2 se puede usar en: AT, BE, BG, CA, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MT, NL, NO, PL, PT, RU, RO, SE, SI, SK, US.

- CE Equipo de Clase 2 según la Directiva Europea 2014/53/EC (R&TTE) según la cual los siguientes estados miembros de la EEE aplican restricciones para ofrecerlo en el mercado o se requiere de autorización para la puesta en servicio:
- Francia
  - Italia
  - Noruega (si se utiliza en el área geográfica comprendida en un radio de 20 km del centro de Ny-Ålesund)
- La conformidad para países con otras regulaciones nacionales que no sean cubiertas por la FCC parte 15 o la Directiva europea 2014/53/CE debe ser aprobada antes del uso y operación.
  - En cumplimiento con la ley de radio de Japón y la ley de comercio y telecomunicaciones de Japón.
    - La concesión del equipo se otorga según la ley de radio de Japón (電波法) y la ley de comercio y telecomunicaciones de Japón (電気通信事業法).
    - El dispositivo no debe ser modificado (de lo contrario, el número de concesión otorgado quedará invalidado).



## Dangerous Goods Regulations

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ES



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GeoMax has developed **Guidelines** on “How to carry GeoMax products” and “How to ship GeoMax products” with Lithium batteries. Before any transportation of a GeoMax product, we ask you to consult these guidelines on our web page (<http://www.geomax-positioning.com/dgr>) to ensure that you are in accordance with the IATA Dangerous Goods Regulations and that the GeoMax products can be transported correctly.



Damaged or defective batteries are prohibited from being carried or transported onboard any aircraft. Therefore, ensure that the condition of any battery is safe for transportation.



## 2 Componentes del instrumento

### Zenith15/25 Pro components



- a TNC-connector for external UHF antenna, only for models with UHF radio
- b Battery compartment with microSD and SIM card slot
- c Keyboard with LEDs, ON/OFF button and Function button
- d Serial, USB and power port
- e Antenna Reference Plane (ARP) is where the instrument heights are measured to

## ON/OFF button


Button	Function
ON/OFF	 If Zenith15/25 Pro is off: Turns on Zenith15/25 Pro when held for 2 s.  While the Zenith15/25 Pro is booting the two Power LEDs flash.
	If Zenith15/25 Pro is already on: Turns off Zenith15/25 Pro when held for 2 s.

ES

## Function button



All functions described assume the Zenith15/25 Pro is already on.

Button	Function
Function	 Press and hold button for <1 s.

Button	Function
	<p>Switches the Zenith15/25 Pro between rover or base mode.</p> <p>Press and hold button for 3 s.</p> <p>Updates the base position coordinates when Zenith15/25 Pro is in base mode. The RTK base LED flashes for 2 s. When no position is available, the LED flashes red.</p> <p>Press and hold button for 5 s.</p> <p>Connects to the configured RTK base station or NTRIP server when the Zenith15/25 Pro is in rover mode. The RTK rover LED flashes for 2 s. No action if a rover mode is not configured.</p>

### 3 Especificaciones ambientales

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#### Especificaciones ambientales

#### Temperaturas (°C):

Instrumento:	-40 a +65 (operación)	-40 a +80 (almacenamiento)
Batería ZBA201:	-20 a +55 (operación)	-40 a +70 (almacenamiento)

#### Protección:

IP68 (IEC 60529)

#### Vibración:

Prueba de vibración según la norma ISO 9022-36-05

**Golpes:**

Soporta caídas de 2 m (6.6 ft) desde el bastón sobre una superficie rígida.

**Humedad:**

100% condensante

Los efectos de la condensación se pueden contrarrestar en forma efectiva secando periódicamente el instrumento.

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## 4 Transporte

### Transporte en campo

Cuando se transporte el equipo en el campo hay que procurar siempre

- llevar siempre el equipo en su maletín original,
- o llevar al hombro el trípode con las patas abiertas, con el instrumento colocado y atornillado, todo ello en posición vertical.

### Transport in a road vehicle

Never carry the product loose in a road vehicle, as it can be affected by shock and vibration. Always carry the product in its container and secure it.

For products for which no container is available use the original packaging or its equivalent.

### Envío

Para transportar el producto en tren, avión o barco utilizar siempre el embalaje original de GeoMax completo (estuche de transporte y caja de

cartón) u otro embalaje adecuado, para proteger el instrumento frente a golpes y vibraciones.

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### **Envío y transporte de las baterías**

Para el transporte o envío de baterías, el encargado del producto debe asegurarse que se observa la legislación nacional e internacional correspondiente. Antes de efectuar el transporte o el envío, hay que contactar con la compañía de transporte de pasajeros o mercancías.

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## 5

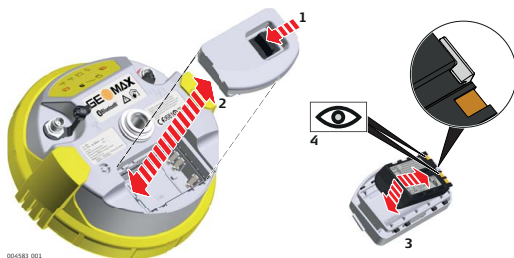
# Funcionamiento



Cargue la batería antes de usarla por primera vez.

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### Change battery step-by-step

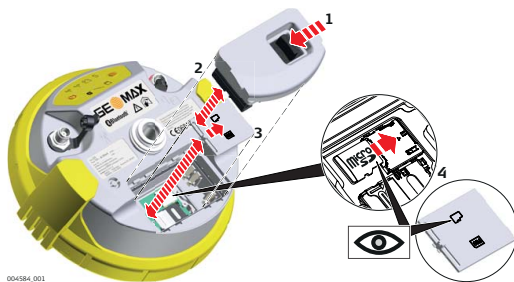




The battery is inserted in the bottom part of the instrument.

1. Push the slide fastener of the battery compartment in the direction of the arrow with the open-lock symbol.
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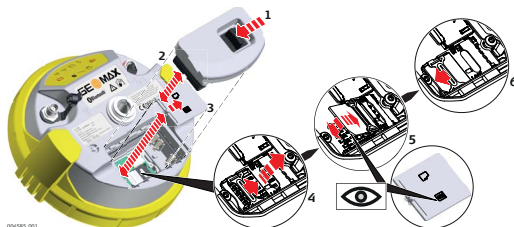


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---

1. Push the slide fastener of the battery compartment in the direction of the arrow with the open-lock symbol.
  2. Remove the cover from the battery compartment.
  3. Press the latch of the SIM/microSD card cover and remove the cover.
  4. Slide the microSD card with the logo facing upwards firmly into the slot until it clicks into position.
-

## Inserting a SIM card step-by-step



ES

✎ Inserting/removing the SIM card while the Zenith15/25 Pro is turned on can result in permanent damage to the card. Only insert/remove the SIM card when the Zenith15/25 Pro is switched off.

✎ The SIM card is inserted into a slot inside the battery compartment.

1. Push the slide fastener of the battery compartment in the direction of the arrow with the open-lock symbol.

---

  2. Remove the cover from battery compartment.

---

  3. Press the latch of the SIM/microSD card cover and remove the cover.

---

  4. Push the SIM card holder in the direction of the OPEN arrow and flip it up.

---

  5. Place the SIM card into the SIM card holder, the chip facing the connectors inside the slot - as shown on the SIM/microSD card cover.  
Press the SIM card holder down.

---

  6. Push the SIM card holder in the direction of the LOCK arrow to close.
-





## **827821-1.2.0es**

Traducción de la versión original (827821-1.2.0en)

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# GeoMax Zenith15/25 Pro Series



**1**

## Informations importantes sur l'instrument



Avant l'emploi du produit, lire et respecter le manuel de l'utilisateur chargé sur le périphérique de stockage de données fourni.



A conserver pour une consultation ultérieure !

### Utilisation pré- vue

- Calculs au moyen de logiciels.
- Enregistrement de mesures.
- Exécution de travaux de mesure utilisant différentes techniques de mesure GNSS.
- Enregistrement de données GNSS et de codes associés aux points.
- Commande à distance du produit.
- Echange de données avec des appareils extérieurs.
- Mesure de données brutes et calcul de coordonnées en utilisant la phase et porteuse et les signaux de code des satellites GNSS.



Ne jetez pas ce produit avec les ordures ménagères.

### Conformité avec les prescriptions nationales

- FCC partie 15, applicable aux États-Unis
- GeoMax AG déclare par la présente que le produit de type Zenith15/25 Pro est conforme aux exigences fondamentales de la directive européenne 2014/53/CE et d'autres directives européennes applicables. La déclaration de conformité est consultable sur : <http://www.geomax-positioning.de/Downloads.htm>.
- Cet équipement de classe 2 peut être utilisé dans les pays suivants : AT, BE, BG, CA, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MT, NL, NO, PL, PT, RU, RO, SE, SI, SK, US.

FR

- « Équipement de classe 2 selon la directive européenne 2014/53/CE (RED) pour lequel les pays membres de l'EEE suivants appliquent des restrictions à la commercialisation, à la mise en service ou demandent une autorisation pour son utilisation :
- France
  - Italie
  - Norvège (en cas d'utilisation dans un rayon de 20 km à compter du centre de Ny-Ålesund)
- La conformité pour des pays dont la réglementation nationale n'est couverte ni par les règles FCC partie 15 ni par la directive européenne 2014/53/CE doit être approuvée préalablement à toute utilisation.
  - Conformité avec la loi japonaise sur la radiodiffusion et avec la loi japonaise sur les télécommunications
    - Cet appareil est certifié conforme à la loi japonaise sur la radiodiffusion (電波法) et à la loi japonaise sur les télécommunications (電気通信事業法).
    - Cet appareil ne doit pas être modifié (sinon le numéro de certification devient invalide).

## Dangerous Goods Regulations

The products of GeoMax are powered by Lithium batteries.

Lithium batteries can be dangerous under certain conditions and can pose a safety hazard. In certain conditions, Lithium batteries can overheat and ignite.

FR



When carrying or shipping your GeoMax product with Lithium batteries onboard a commercial aircraft, you must do so in accordance with the **IATA Dangerous Goods Regulations**.



GeoMax has developed **Guidelines** on “How to carry GeoMax products” and “How to ship GeoMax products” with Lithium batteries. Before any transportation of a GeoMax product, we ask you to consult these guidelines on our web page (<http://www.geomax-positioning.com/dgr>) to ensure that you are in accordance with the IATA Dangerous Goods Regulations and that the GeoMax products can be transported correctly.



Damaged or defective batteries are prohibited from being carried or transported onboard any aircraft. Therefore, ensure that the condition of any battery is safe for transportation.

---



## 2 Composants de l'instrument

### Zenith15/25 Pro components




- a TNC-connector for external UHF antenna, only for models with UHF radio
- b Battery compartment with microSD and SIM card slot
- c Keyboard with LEDs, ON/OFF button and Function button
- d Serial, USB and power port
- e Antenna Reference Plane (ARP) is where the instrument heights are measured to

**ON/OFF button**

Button	Function
ON/OFF	 <p>If Zenith15/25 Pro is off: Turns on Zenith15/25 Pro when held for 2 s.</p> <p> While the Zenith15/25 Pro is booting the two Power LEDs flash.</p>
	<p>If Zenith15/25 Pro is already on: Turns off Zenith15/25 Pro when held for 2 s.</p>

**Function button**


All functions described assume the Zenith15/25 Pro is already on.

Button	Function
Function	 <p>Press and hold button for &lt;1 s.</p>



Button	Function
	<p>Switches the Zenith15/25 Pro between rover or base mode.</p> <p>Press and hold button for 3 s.</p> <p>Updates the base position coordinates when Zenith15/25 Pro is in base mode. The RTK base LED flashes for 2 s. When no position is available, the LED flashes red.</p> <p>Press and hold button for 5 s.</p> <p>Connects to the configured RTK base station or NTRIP server when the Zenith15/25 Pro is in rover mode. The RTK rover LED flashes for 2 s. No action if a rover mode is not configured.</p>

### 3 Environnement

---

#### Environnement

#### Températures (°C) :

Instrument :	De -40 à +65 (service)	De -40 à +80 (stockage)
Batterie ZBA201 :	De -20 à +55 (service)	De -40 à +70 (stockage)

#### Protection :

IP68 (CEI 60529)

#### Vibrations :

Test de vibrations selon ISO 9022-36-05

**Chocs :**

Résiste à une chute d'une hauteur de 2 m (6,6 ft) sur une surface dure.

**Humidité :**

100 % avec condensation

Il convient de neutraliser les effets de la condensation par un séchage complet périodique de l'instrument.

---

## 4 **Transport**

### **Transport sur le terrain**

Lors du transport sur le terrain, toujours s'assurer de :

- transporter le produit dans son coffret d'origine,
- ou de transporter le trépied sur l'épaule, l'instrument monté restant à la verticale

### **Transport in a road vehicle**

Never carry the product loose in a road vehicle, as it can be affected by shock and vibration. Always carry the product in its container and secure it.

For products for which no container is available use the original packaging or its equivalent.

### **Expédition**

Utilisez l'emballage d'origine de GeoMax, le coffret de transport et le carton d'expédition ou équivalent pour tout transport par train, avion ou bateau. Il sera ainsi protégé des chocs et des vibrations.

## **Expédition, transport de batteries**

Lors du transport ou de l'expédition de batteries, le responsable du produit doit s'assurer du respect des lois et réglementations nationales et internationales applicables. Avant le transport ou l'expédition, contacter la société locale de transport de personnes ou de marchandises.

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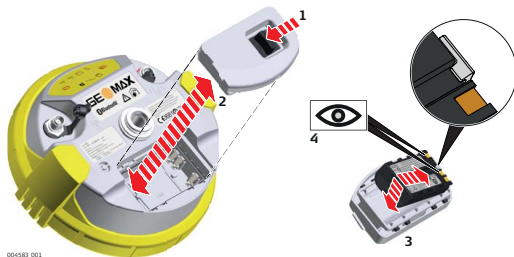
# 5


## Utilisation



Veillez à charger la batterie avant la première utilisation.

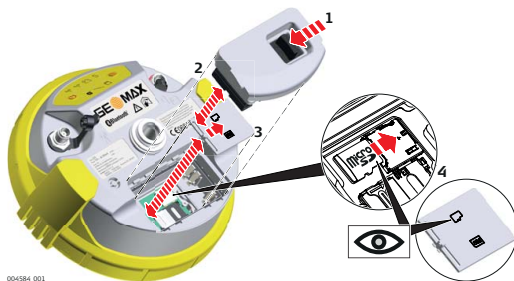
### Change battery step-by-step



 The battery is inserted in the bottom part of the instrument.

1. Push the slide fastener of the battery compartment in the direction of the arrow with the open-lock symbol.
2. Remove the cover from the battery compartment.
3. With the battery contacts facing upwards, slide the battery into the cover of the battery compartment.
4. Push the battery downwards so that it locks into position.
5. Insert the cover of the battery compartment into the compartment and push the slide fastener in the direction of the arrow with the close-lock symbol.
6. To remove a battery, push the slide fastener of the battery compartment in the direction of the arrow with the open-lock symbol and remove the cover.
7. Push the battery slightly upwards and at the same time pull out the bottom part of the battery. This releases the battery from its fixed position.
8. Remove the battery.

## Insert a microSD card step-by-step



004584\_001



Removing the microSD card while the instrument is turned on can cause loss of data. Only remove the microSD card or unplug connecting cables when the instrument is switched off.





The microSD card is inserted into a slot inside the battery compartment of the instrument.

- 
1. Push the slide fastener of the battery compartment in the direction of the arrow with the open-lock symbol.

---

  2. Remove the cover from the battery compartment.

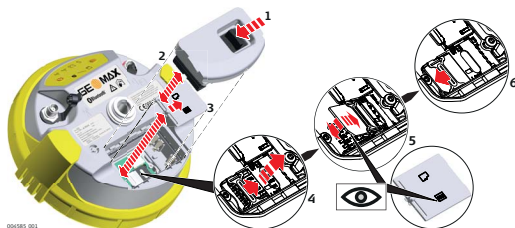
---

  3. Press the latch of the SIM/microSD card cover and remove the cover.

---

  4. Slide the microSD card with the logo facing upwards firmly into the slot until it clicks into position.
-

## Inserting a SIM card step-by-step



✎ Inserting/removing the SIM card while the Zenith15/25 Pro is turned on can result in permanent damage to the card. Only insert/remove the SIM card when the Zenith15/25 Pro is switched off.

✎ The SIM card is inserted into a slot inside the battery compartment.

1. Push the slide fastener of the battery compartment in the direction of the arrow with the open-lock symbol.

---

  2. Remove the cover from battery compartment.

---

  3. Press the latch of the SIM/microSD card cover and remove the cover.

---

  4. Push the SIM card holder in the direction of the OPEN arrow and flip it up.

---

  5. Place the SIM card into the SIM card holder, the chip facing the connectors inside the slot - as shown on the SIM/microSD card cover.  
Press the SIM card holder down.

---

  6. Push the SIM card holder in the direction of the LOCK arrow to close.
-



## **827821-1.2.0fr**

Traduction de la version originale (827821-1.2.0en)

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# Serie GeoMax Zenith15/25 Pro



**GE**  **MAX**

**Guida rapida**  
Versione 1.2

**1**

## Importanti informazioni sullo strumento



Prima di utilizzare il prodotto, leggere e seguire le indicazioni del Manuale Utente contenuto nel dispositivo di memoria in dotazione.



Da conservare per futura consultazione.

### Usò previsto

- Esecuzione di calcoli mediante software.
- Registrazione delle misure.
- Esecuzione di operazioni di misurazione con tecniche GNSS.
- Registrazione di dati GNSS.
- Comando a distanza dello strumento.
- Trasmissione dei dati con apparecchiature esterne.
- Misura di dati grezzi e calcolo di coordinate mediante codice e fase dei satelliti GNSS.

IT



Il prodotto non deve essere smaltito insieme ai rifiuti domestici.

## Conformità alla legislazione nazionale

- FCC parte 15 (in vigore negli Stati Uniti)
- GeoMax AG dichiara che l'apparecchiatura radio di tipo Zenith15/25 Pro è conforme ai requisiti essenziali e alle altre disposizioni pertinenti della direttiva 2014/53/CE oltre che alle altre direttive europee in vigore. La dichiarazione di conformità è consultabile all'indirizzo <http://www.geomax-positioning.de/Downloads.htm>.
- Questa apparecchiatura di classe 2 può essere utilizzata nei seguenti paesi: AT, BE, BG, CA, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MT, NL, NO, PL, PT, RU, RO, SE, SI, SK, US.

- CE
- Apparecchiatura di classe 2 ai sensi della direttiva europea 2014/53/CE (RED) per la quale i seguenti stati membri del SEE prevedono limitazioni alla commercializzazione e alla messa in esercizio o per il cui utilizzo richiedono autorizzazioni:
- Francia
  - Italia
  - Norvegia (in caso di utilizzo entro un raggio di 20 km dal centro di Ny-Ålesund)
- La conformità per i paesi in cui vigono altre disposizioni nazionali non coperte dalla direttiva FCC, parte 15, o dalla direttiva europea 2014/53/CE deve essere approvata prima della messa in esercizio.
  - Conformità alle norme giapponesi che disciplinano le comunicazioni radio e al diritto commerciale giapponese in materia di telecomunicazioni.
    - Il presente dispositivo è conforme alle norme giapponesi che disciplinano le comunicazioni radio (電波法) e al diritto commerciale giapponese in materia di telecomunicazioni (電気通信事業法).
    - Questo dispositivo non deve essere modificato, altrimenti il numero di designazione non sarà più valido.
-



## Dangerous Goods Regulations

The products of GeoMax are powered by Lithium batteries.

Lithium batteries can be dangerous under certain conditions and can pose a safety hazard. In certain conditions, Lithium batteries can overheat and ignite.



When carrying or shipping your GeoMax product with Lithium batteries onboard a commercial aircraft, you must do so in accordance with the **IATA Dangerous Goods Regulations**.



GeoMax has developed **Guidelines** on “How to carry GeoMax products” and “How to ship GeoMax products” with Lithium batteries. Before any transportation of a GeoMax product, we ask you to consult these guidelines on our web page (<http://www.geomax-positioning.com/dgr>) to ensure that you are in accordance with the IATA Dangerous Goods Regulations and that the GeoMax products can be transported correctly.



Damaged or defective batteries are prohibited from being carried or transported onboard any aircraft. Therefore, ensure that the condition of any battery is safe for transportation.



## 2 Componenti dello strumento

### Zenith15/25 Pro components



- a TNC-connector for external UHF antenna, only for models with UHF radio
- b Battery compartment with microSD and SIM card slot
- c Keyboard with LEDs, ON/OFF button and Function button
- d Serial, USB and power port
- e Antenna Reference Plane (ARP) is where the instrument heights are measured to

## ON/OFF button


Button	Function
ON/OFF	 If Zenith15/25 Pro is off: Turns on Zenith15/25 Pro when held for 2 s.  While the Zenith15/25 Pro is booting the two Power LEDs flash.
	If Zenith15/25 Pro is already on: Turns off Zenith15/25 Pro when held for 2 s.

IT

## Function button



All functions described assume the Zenith15/25 Pro is already on.

Button	Function
Function	 Press and hold button for <1 s.

Button	Function
	<p>Switches the Zenith15/25 Pro between rover or base mode.</p> <p>Press and hold button for 3 s.</p> <p>Updates the base position coordinates when Zenith15/25 Pro is in base mode. The RTK base LED flashes for 2 s. When no position is available, the LED flashes red.</p> <p>Press and hold button for 5 s.</p> <p>Connects to the configured RTK base station or NTRIP server when the Zenith15/25 Pro is in rover mode. The RTK rover LED flashes for 2 s. No action if a rover mode is not configured.</p>

### 3

## Specifiche ambientali

---

### Specifiche ambientali

#### Temperature (°C):

Strumento:	Da -40 a +65 (funzionamento)	Da -40 a +80 (stoccaggio)
Batteria ZBA201:	Da -20 a +55 (funzionamento)	Da -40 a +70 (stoccaggio)

#### Protezione:

IP68 (IEC 60529)

#### Vibrazione:

Test vibrazioni secondo ISO 9022-36-05

IT

**Urto:**

Resistente a una caduta di 2 m dalla palina (6.6 ft) su superficie dura.

**Umidità:**

100% condensante

Gli effetti della condensa si possono contrastare in modo efficace asciugando periodicamente lo strumento.

---

## 4

# Trasporto

---

### Trasporto in campagna

Per il trasporto dell'apparecchiatura sul campo assicurarsi sempre di

- trasportare lo strumento nella sua custodia originale
- o trasportare il treppiedi con le gambe aperte appoggiandolo sulla spalla, tenendo sempre lo strumento in posizione eretta.

IT

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### Transport in a road vehicle

Never carry the product loose in a road vehicle, as it can be affected by shock and vibration. Always carry the product in its container and secure it.

For products for which no container is available use the original packaging or its equivalent.

---

### Spedizione

Quando si spedisce lo strumento per mezzo di treni, aerei o navi usare l'imballaggio originale GeoMax, il contenitore o il cartone per il trasporto, o un altro imballaggio idoneo che protegga lo strumento da colpi e vibrazioni.

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**Spedizione e trasporto delle batterie**

Per il trasporto o la spedizione delle batterie, la persona responsabile del prodotto deve verificare il rispetto di leggi e regolamenti nazionali e internazionali applicabili. Prima di trasportare o spedire le batterie, contattare il proprio spedizioniere o società di trasporto locale.

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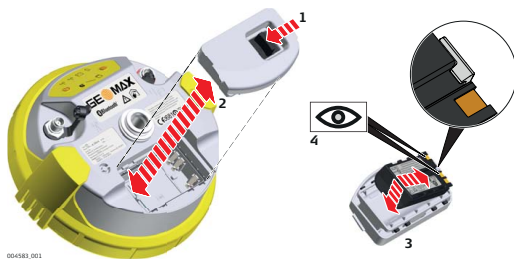
## 5

## Funzionamento



Caricare la batteria prima di utilizzarla per la prima volta.

### Change battery step-by-step

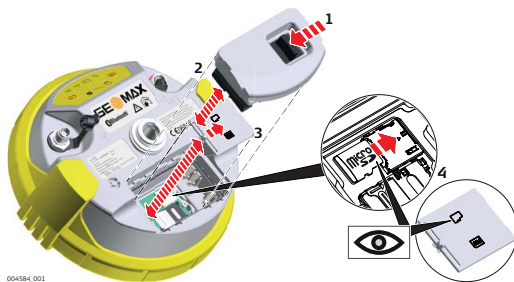




The battery is inserted in the bottom part of the instrument.

1. Push the slide fastener of the battery compartment in the direction of the arrow with the open-lock symbol.
2. Remove the cover from the battery compartment.
3. With the battery contacts facing upwards, slide the battery into the cover of the battery compartment.
4. Push the battery downwards so that it locks into position.
5. Insert the cover of the battery compartment into the compartment and push the slide fastener in the direction of the arrow with the close-lock symbol.
6. To remove a battery, push the slide fastener of the battery compartment in the direction of the arrow with the open-lock symbol and remove the cover.
7. Push the battery slightly upwards and at the same time pull out the bottom part of the battery. This releases the battery from its fixed position.
8. Remove the battery.

## Insert a microSD card step-by-step



Removing the microSD card while the instrument is turned on can cause loss of data. Only remove the microSD card or unplug connecting cables when the instrument is switched off.

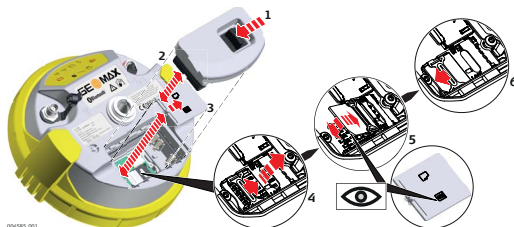


The microSD card is inserted into a slot inside the battery compartment of the instrument.

---

1. Push the slide fastener of the battery compartment in the direction of the arrow with the open-lock symbol.
  2. Remove the cover from the battery compartment.
  3. Press the latch of the SIM/microSD card cover and remove the cover.
  4. Slide the microSD card with the logo facing upwards firmly into the slot until it clicks into position.
-

## Inserting a SIM card step-by-step



✎ Inserting/removing the SIM card while the Zenith15/25 Pro is turned on can result in permanent damage to the card. Only insert/remove the SIM card when the Zenith15/25 Pro is switched off.

✎ The SIM card is inserted into a slot inside the battery compartment.

1. Push the slide fastener of the battery compartment in the direction of the arrow with the open-lock symbol.

---

  2. Remove the cover from battery compartment.

---

  3. Press the latch of the SIM/microSD card cover and remove the cover.

---

  4. Push the SIM card holder in the direction of the OPEN arrow and flip it up.

---

  5. Place the SIM card into the SIM card holder, the chip facing the connectors inside the slot - as shown on the SIM/microSD card cover.  
Press the SIM card holder down.

---

  6. Push the SIM card holder in the direction of the LOCK arrow to close.
-





## **827821-1.2.0it**

Traduzione dal testo originale (827821-1.2.0en)

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# GeoMax Série Zenith15/25 Pro



# 1 Informações importantes sobre o instrumento

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Leia e siga o Manual do Usuário gravado no dispositivo de armazenamento de dados antes de usar o produto.

---



Manter para referência futura!

---

## Pretenção de uso

- Cálculo com software.
  - Gravação de medições.
  - Execução de tarefas de medição com várias técnicas de medição GNSS.
  - Gravação de informação GNSS e dados de posição.
  - Controle Remoto do produto.
  - Intercambio de dados com aparelhos externos.
  - Medição de dados brutos e cálculo de coordenadas com fase da portadora e sinal de código dos satélites GNSS.
-



O produto não deve ser descartado juntamente com o lixo doméstico.

---

### **Conformidade com os regula- mentos nacionais**

- FCC Parte 15 (aplicável nos EUA)
- Pela presente, a GeoMax AG declara que o equipamento de rádio tipo Zenith15/25 Pro está em conformidade com os requisitos essenciais e outras disposições relevantes da Diretiva 2014/53/CE e outras diretivas europeias aplicáveis. A declaração de conformidade pode ser consultada em <http://www.geomax-positioning.de/Downloads.htm>.
- Este equipamento de classe 2 pode ser operado em: AT, BE, BG, CA, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MT, NL, NO, PL, PT, RU, RO, SE, SI, SK, US.

PT-BR

- (CE)
 Equipamento classe 2 de acordo com a Diretriz Europeia 2014/53/CE (RED) para os quais seguintes os Estados membros do EEA aplicam restrições à colocação no mercado ou à colocação em serviço, ou ainda sujeitas à autorização para uso:
- França
  - Itália
  - Noruega (se for utilizado na área geográfica dentro de um raio de 20 km a partir do centro de Ny-Ålesund)
- A conformidade para países com outras regulações nacionais não cobertas pela FCC parte 15 ou Diretiva europeia 2014/53/CE tem que ser previamente aprovada para uso e operação.
  - Acordo com a Lei de Rádio Japonesa e Lei de Negócios de Telecomunicações Japonesa.
    - Este dispositivo é concebido de acordo com a Lei de Rádio Japonesa (電波法) e a Lei de Negócios de Telecomunicações Japonesas (電気通信事業法).
    - Este dispositivo não pode ser modificado (caso contrário, o número da concessão se tornará inválido).
-

## Dangerous Goods Regulations

The products of GeoMax are powered by Lithium batteries.

Lithium batteries can be dangerous under certain conditions and can pose a safety hazard. In certain conditions, Lithium batteries can overheat and ignite.



When carrying or shipping your GeoMax product with Lithium batteries onboard a commercial aircraft, you must do so in accordance with the **IATA Dangerous Goods Regulations**.



GeoMax has developed **Guidelines** on “How to carry GeoMax products” and “How to ship GeoMax products” with Lithium batteries. Before any transportation of a GeoMax product, we ask you to consult these guidelines on our web page (<http://www.geomax-positioning.com/dgr>) to ensure that you are in accordance with the IATA Dangerous Goods Regulations and that the GeoMax products can be transported correctly.



Damaged or defective batteries are prohibited from being carried or transported onboard any aircraft. Therefore, ensure that the condition of any battery is safe for transportation.

PT-BR



## 2 Componentes do Instrumento

### Zenith15/25 Pro components



- a TNC-connector for external UHF antenna, only for models with UHF radio
- b Battery compartment with microSD and SIM card slot
- c Keyboard with LEDs, ON/OFF button and Function button
- d Serial, USB and power port
- e Antenna Reference Plane (ARP) is where the instrument heights are measured to

## ON/OFF button


Button	Function
ON/OFF	 If Zenith15/25 Pro is off: Turns on Zenith15/25 Pro when held for 2 s.  While the Zenith15/25 Pro is booting the two Power LEDs flash.
	If Zenith15/25 Pro is already on: Turns off Zenith15/25 Pro when held for 2 s.

PT-BR

## Function button



All functions described assume the Zenith15/25 Pro is already on.

Button	Function
Function	 Press and hold button for <1 s.

<b>Button</b>	<b>Function</b>
	<p>Switches the Zenith15/25 Pro between rover or base mode.</p> <p>Press and hold button for 3 s.</p> <p>Updates the base position coordinates when Zenith15/25 Pro is in base mode. The RTK base LED flashes for 2 s. When no position is available, the LED flashes red.</p> <p>Press and hold button for 5 s.</p> <p>Connects to the configured RTK base station or NTRIP server when the Zenith15/25 Pro is in rover mode. The RTK rover LED flashes for 2 s. No action if a rover mode is not configured.</p>



### 3

## Especificações ambientais

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### Especificações ambientais

#### Temperaturas (°C):

Instrumento:	-40 to +65 (operação)	-40 to +80 (armazenamento)
Bateria ZBA201	-20 to +55 (operação)	-40 to +70 (armazenamento)

#### Proteção:

IP68 (IEC 60529)

#### Vibração:

Vibração de acordo com ISO 9022-36-05

PT-BR

**Choque**

Resistente ao tombo de bastão de 2 m sobre superfície dura

**Humidade:**

100% condensável

Os efeitos da condensação são eficazmente neutralizados através de secagem periódica do instrumento.

## 4

# Transporte

---

### Transporte no campo.

Ao transportar o equipamento no campo, tenha a certeza que esteja

- transportar o produto no estojo original,
- ou carregue no tripé com as patas abertas e apoiadas no seu ombro, mantendo-o em pé.

---

### Transport in a road vehicle

Never carry the product loose in a road vehicle, as it can be affected by shock and vibration. Always carry the product in its container and secure it.

For products for which no container is available use the original packaging or its equivalent.

---

### Remessa

O transporte do aparelho por via férrea, aérea ou marítima deve ser sempre efetuada com a embalagem original completa da GeoMax, estojo de

PT-BR

transporte e caixa de papel cartão (ou outro meio equivalente) de modo a proteger o equipamento contra os choques e vibrações.

---

**Remessa, transporte das baterias**

Durante o transporte ou remessa das baterias, a pessoa responsável pelo produto deve assegurar que as regras aplicáveis e regulamentos nacionais e internacionais sejam observados. Antes do transporte e remessa, contate o transportador local ou a sua empresa de transporte de mercadorias.

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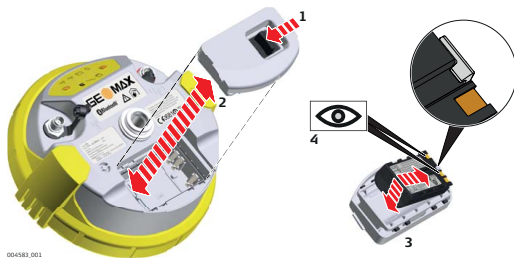
## 5

## Operação



A bateria deve ser carregada antes de utilizá-la pela primeira vez.

### Change battery step-by-step



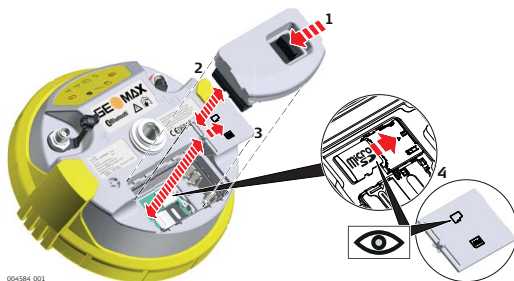
PT-BR



The battery is inserted in the bottom part of the instrument.

1. Push the slide fastener of the battery compartment in the direction of the arrow with the open-lock symbol.
2. Remove the cover from the battery compartment.
3. With the battery contacts facing upwards, slide the battery into the cover of the battery compartment.
4. Push the battery downwards so that it locks into position.
5. Insert the cover of the battery compartment into the compartment and push the slide fastener in the direction of the arrow with the close-lock symbol.
6. To remove a battery, push the slide fastener of the battery compartment in the direction of the arrow with the open-lock symbol and remove the cover.
7. Push the battery slightly upwards and at the same time pull out the bottom part of the battery. This releases the battery from its fixed position.
8. Remove the battery.

## Insert a microSD card step-by-step



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Removing the microSD card while the instrument is turned on can cause loss of data. Only remove the microSD card or unplug connecting cables when the instrument is switched off.

PT-BR



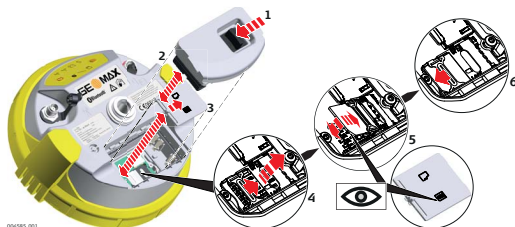
The microSD card is inserted into a slot inside the battery compartment of the instrument.

---

1. Push the slide fastener of the battery compartment in the direction of the arrow with the open-lock symbol.
  2. Remove the cover from the battery compartment.
  3. Press the latch of the SIM/microSD card cover and remove the cover.
  4. Slide the microSD card with the logo facing upwards firmly into the slot until it clicks into position.
-



## Inserting a SIM card step-by-step



✎ Inserting/removing the SIM card while the Zenith15/25 Pro is turned on can result in permanent damage to the card. Only insert/remove the SIM card when the Zenith15/25 Pro is switched off.

✎ The SIM card is inserted into a slot inside the battery compartment.

1. Push the slide fastener of the battery compartment in the direction of the arrow with the open-lock symbol.

---

  2. Remove the cover from battery compartment.

---

  3. Press the latch of the SIM/microSD card cover and remove the cover.

---

  4. Push the SIM card holder in the direction of the OPEN arrow and flip it up.

---

  5. Place the SIM card into the SIM card holder, the chip facing the connectors inside the slot - as shown on the SIM/microSD card cover.  
Press the SIM card holder down.

---

  6. Push the SIM card holder in the direction of the LOCK arrow to close.
-





## **827821-1.2.0pt-br**

Traduzido do texto original (827821-1.2.0en)

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**GeoMax AG**  
[www.geomax-positioning.com](http://www.geomax-positioning.com)

# GeoMax Zenith15/25 Pro



**Краткое руководство**  
Версия 1.2

# 1

## Важная информация о Вашем Инструменте



Перед использованием инструмента ознакомьтесь с Руководством пользователя.



Сохраняйте документацию для использования в дальнейшем в качестве справочника!

### Штатное использование

- Вычисления при помощи ПО.
- Запись измерений.
- Решение геодезических задач с помощью различных технологий GNSS измерений.
- Запись GNSS данных.
- Дистанционное управление прибором.
- Обмен данными с внешними устройствами.
- Измерение и вычисление координат местоположения в результате получения фазового и кодового решений по GNSS сигналам.



Устройство не должен утилизироваться вместе с бытовыми отходами.

### Соответствие национальным нормам

- FCC, часть 15 (применяется в США)
- Настоящим компания GeoMax AG заявляет, что радиооборудование Zenith15/25 Pro соответствует основным требованиям и прочим применимым положениям Директивы 2014/53/ЕС и других применимых европейских директив. Полный текст декларации соответствия доступен на странице <http://www.geomax-positioning.de/Downloads.htm>.
- Оборудование класса 2 может эксплуатироваться в: AT, BE, BG, CA, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MT, NL, NO, PL, PT, RU, RO, SE, SI, SK, US.

RU

- CE Следующие страны-участницы ЕЭС, согласно европейской Директиве о радиооборудовании 2014/53/ЕС, накладывают ограничения по выводу на рынок и эксплуатации или требуют разрешения на использование оборудования класса 2:
- Франция
  - Италия
  - Норвегия (при использовании в радиусе 20 км от центра города Нью-Олесунн)
- Соответствие национальным нормам, отличающимся от правил FCC, часть 15, или требований Директивы 2014/53/ЕС, должно проверяться и согласовываться до начала использования и эксплуатации.
  - Соответствие японскому законодательству о радиосвязи и телекоммуникациях.
    - Данное устройство признано соответствующим японскому законодательству о радиосвязи и телекоммуникациях (電波法) и торговому праву по телекоммуникациям (電気通信事業法).
    - Устройство не подлежит изменениям (в противном случае выданный номер будет признан недействительным).



## Dangerous Goods Regulations

The products of GeoMax are powered by Lithium batteries.

Lithium batteries can be dangerous under certain conditions and can pose a safety hazard. In certain conditions, Lithium batteries can overheat and ignite.



When carrying or shipping your GeoMax product with Lithium batteries onboard a commercial aircraft, you must do so in accordance with the **IATA Dangerous Goods Regulations**.



GeoMax has developed **Guidelines** on “How to carry GeoMax products” and “How to ship GeoMax products” with Lithium batteries. Before any transportation of a GeoMax product, we ask you to consult these guidelines on our web page (<http://www.geomax-positioning.com/dgr>) to ensure that you are in accordance with the IATA Dangerous Goods Regulations and that the GeoMax products can be transported correctly.



Damaged or defective batteries are prohibited from being carried or transported onboard any aircraft. Therefore, ensure that the condition of any battery is safe for transportation.

## 2



## Составляющие инструмента

### Zenith15/25 Pro components



- a TNC-connector for external UHF antenna, only for models with UHF radio
- b Battery compartment with microSD and SIM card slot
- c Keyboard with LEDs, ON/OFF button and Function button
- d Serial, USB and power port
- e Antenna Reference Plane (ARP) is where the instrument heights are measured to

## ON/OFF button


Button	Function
ON/OFF	 If Zenith15/25 Pro is off: Turns on Zenith15/25 Pro when held for 2 s.  While the Zenith15/25 Pro is booting the two Power LEDs flash.
	If Zenith15/25 Pro is already on: Turns off Zenith15/25 Pro when held for 2 s.

RU

## Function button



All functions described assume the Zenith15/25 Pro is already on.

Button	Function
Function	 Press and hold button for <1 s.

Switches the Zenith15/25 Pro between rover or base mode.

Button	Function
	Press and hold button for 3 s.
	Updates the base position coordinates when Zenith15/25 Pro is in base mode. The RTK base LED flashes for 2 s. When no position is available, the LED flashes red.
	Press and hold button for 5 s.
	Connects to the configured RTK base station or NTRIP server when the Zenith15/25 Pro is in rover mode. The RTK rover LED flashes for 2 s. No action if a rover mode is not configured.

### 3 Эксплуатационные характеристики

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#### Эксплуатационные характеристики

#### Диапазон температур (°C):

Приемник:	-40 до +65 (диапазон рабочих температур)	-40 до +80 (диапазон температур хранения)
Аккумулятор ZBA201:	-20 до +55 (диапазон рабочих температур)	-40 до +70 (диапазон температур хранения)

#### °ровень защиты:

IP68 (IEC 60529)

#### Вибрации:

Соответствие ISO 9022-36-05

RU

**°дары:**

Выдерживает опрокидывание с вехи 2,0 м на твердую поверхность.

**Влажность:**

100%

Влияние конденсации влаги успешно устраняется периодической протиркой и просушкой инструмента.

## 4

# Транспортировка

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### Транспортировка в ходе полевых работ

При переноске инструмента в ходе полевых работ обязательно убедитесь в том, что он переносится:

- в оригинальном контейнере
  - либо на штативе в вертикальном положении.
- 

### Transport in a road vehicle

Never carry the product loose in a road vehicle, as it can be affected by shock and vibration. Always carry the product in its container and secure it.

For products for which no container is available use the original packaging or its equivalent.

---

### Транспортировка

При транспортировке по железной дороге на судах или самолетах обязательно используйте полный комплект GeoMax для упаковки и транспортировки, либо аналогичные средства для защиты тахеометра от ударов и вибрации.

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**Транспортировка и перевозка аккумуляторов**

При транспортировке или перевозке аккумуляторов лицо, ответственное за оборудование должно убедиться, что при этом соблюдаются все национальные и международные требования к таким действиям. Перед транспортировкой оборудования обязательно свяжитесь с представителями компании-перевозчика.

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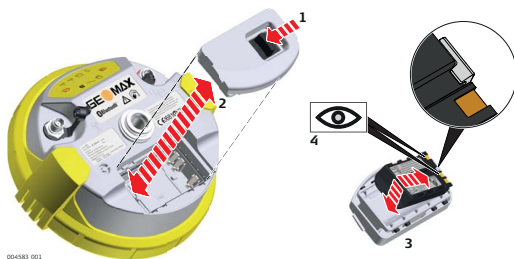
## 5

## Работа с инструментом



Батарея должна быть заряжена перед первым использованием инструмента.

Change battery  
step-by-step



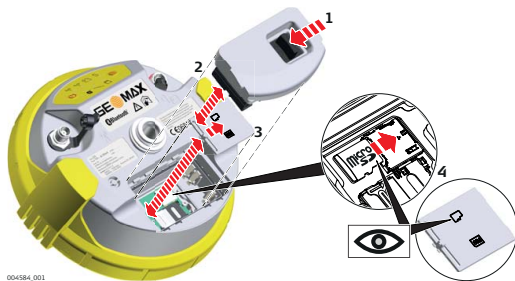
RU



The battery is inserted in the bottom part of the instrument.

1. Push the slide fastener of the battery compartment in the direction of the arrow with the open-lock symbol.
2. Remove the cover from the battery compartment.
3. With the battery contacts facing upwards, slide the battery into the cover of the battery compartment.
4. Push the battery downwards so that it locks into position.
5. Insert the cover of the battery compartment into the compartment and push the slide fastener in the direction of the arrow with the close-lock symbol.
6. To remove a battery, push the slide fastener of the battery compartment in the direction of the arrow with the open-lock symbol and remove the cover.
7. Push the battery slightly upwards and at the same time pull out the bottom part of the battery. This releases the battery from its fixed position.
8. Remove the battery.

## Insert a microSD card step-by-step



☞ Removing the microSD card while the instrument is turned on can cause loss of data. Only remove the microSD card or unplug connecting cables when the instrument is switched off.

☞ The microSD card is inserted into a slot inside the battery compartment of the instrument.

1. Push the slide fastener of the battery compartment in the direction of the arrow with the open-lock symbol.

---

  2. Remove the cover from the battery compartment.

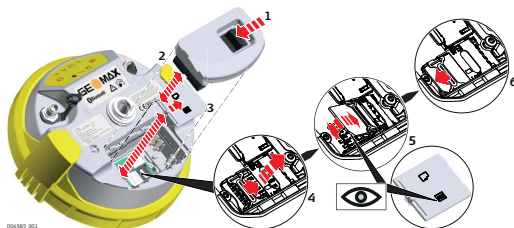
---

  3. Press the latch of the SIM/microSD card cover and remove the cover.

---

  4. Slide the microSD card with the logo facing upwards firmly into the slot until it clicks into position.
-

## Inserting a SIM card step-by-step



RU

✎ Inserting/removing the SIM card while the Zenith15/25 Pro is turned on can result in permanent damage to the card. Only insert/remove the SIM card when the Zenith15/25 Pro is switched off.

✎ The SIM card is inserted into a slot inside the battery compartment.

1. Push the slide fastener of the battery compartment in the direction of the arrow with the open-lock symbol.

2. Remove the cover from battery compartment.

---

  3. Press the latch of the SIM/microSD card cover and remove the cover.

---

  4. Push the SIM card holder in the direction of the OPEN arrow and flip it up.

---

  5. Place the SIM card into the SIM card holder, the chip facing the connectors inside the slot - as shown on the SIM/microSD card cover.  
Press the SIM card holder down.

---

  6. Push the SIM card holder in the direction of the LOCK arrow to close.
-





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Перевод исходного текста (827821-1.2.0en)

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**GeoMax AG**  
[www.geomax-positioning.com](http://www.geomax-positioning.com)



# GeoMax Zenith15/25 Pro-serie



# 1 Belangrijke informatie over uw instrument

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Lees de gebruikershandleiding en volg de aanwijzingen op de meegeleverde gegevensopslag voordat u het product in gebruik neemt.

---



Bewaren ter referentie!

---

## Beoogd gebruik

- Het rekenen met software.
  - Het vastleggen van metingen.
  - Het uitvoeren van meettaken met behulp van diverse GNSS meettechnieken.
  - Vastleggen van GNSS en puntgerelateerde gegevens.
  - Afstandbediening van het instrument.
  - Data communicatie met externe apparatuur.
  - Het meten van ruwe data en het berekenen van coördinaten met behulp van draaggolf fase en codesignalen van GNSS satellieten.
-



Het product mag niet samen met het huisvuil worden weggegooid.

---

### Conformiteit met nationale regelgeving

- FCC deel 15 (van toepassing in de VS)
- Hierbij verklaart GeoMax AG dat de radioapparatuur, van type Zenith15/25 Pro, voldoet aan de essentiële vereisten en overige relevante bepalingen van Richtlijn 2014/53/EG en andere toepasselijke Europese Richtlijnen. De conformiteitsverklaring kan worden geraadpleegd via <http://www.geomax-positioning.de/Downloads.htm>
- Deze Klasse 2-apparatuur mag gebruikt worden in: AT, BE, BG, CA, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MT, NL, NO, PL, PT, RU, RO, SE, SI, SK, US.

NL

- CE Klasse 2-apparatuur volgens Europese Richtlijn 2014/53/EG (RED), waarvoor de onderstaande EU-lidstaten beperkingen toepassen voor verkoop en gebruik, of autorisatie vereisen voor gebruik:
- Frankrijk
  - Italië
  - Noorwegen (indien gebruikt in het geografische gebied binnen een straal van 20 km vanaf het centrum van Ny-Ålesund)
- Voor landen met andere nationale regelgeving, die niet valt onder FCC deel 15 van Europese richtlijn 2014/53/EG, moet vóór gebruik en inwerkingstelling toestemming worden aangevraagd.
  - Onderwerping aan de Japanse zendwet en de Japanse wet voor zakelijke telecommunicatie.
    - Dit apparaat is toegestaan volgens de Japanse radiowet (電波法) en de Japanse wet voor zakelijke telecommunicatie (電気通信事業法).
    - Dit apparaat mag niet aangepast worden (dan wordt het toegekende identificatienummer ongeldig).
-

## Wetgeving Gevaarlijke Goederen

De producten van GeoMax gebruiken lithiumbatterijen.

Lithiumbatterijen kunnen onder bepaalde omstandigheden gevaarlijk zijn en een veiligheidsrisico vormen. In bepaalde omstandigheden kunnen lithiumbatterijen oververhit raken en ontbranden.



Indien u het GeoMax-product met lithiumbatterijen vervoert of verzendt via een commercieel vliegtuig, moet u dit doen in overeenstemming met de **IATA Wetgeving Gevaarlijke Goederen**.



GeoMax heeft **Richtlijnen** opgesteld over "Het vervoeren van GeoMax-producten" en "Het verzenden van GeoMax-producten" met lithiumbatterijen. Voordat u een GeoMax-product vervoert, willen we u vragen deze richtlijnen te raadplegen op onze website (<http://www.geomax-positioning.com/dgr>) om ervoor te zorgen dat u handelt in overeenstemming met de IATA Wetgeving Gevaarlijke Goederen en dat de GeoMax-producten correct worden vervoerd.

NL



In elk vliegtuig is het verboden beschadigde of defecte batterijen te vervoeren. Zorg er daarom voor dat de conditie van alle batterijen veilig is voor transport.

---

## 2

## Instrumentcomponenten



### Zenith15/25 Pro-componenten



- a TNC-connector voor externe UHF-antenne, alleen voor modellen met UHF-radio
- b Batterijcompartiment met microSD-sleuf en simkaartsleuf
- c Toetsenbord met LED-statuslampjes, aan/uit-toets en functietoets
- d Seriële, USB- en voedingspoort
- e Referentievlak antenne (ARP) is het punt vanaf waar de instrumenthoogtes worden gemeten

NL

**Aan/uit-toets**

Toets	Functie
AAN/UIT 	Als Zenith15/25 Pro uit is: Schakelt de Zenith15/25 Pro in na 2 sec ingedrukt houden.  Terwijl de Zenith15/25 Pro opstart, gaan de twee voedingslampjes knipperen.
	Als de Zenith15/25 Pro al aan staat: Schakelt de Zenith15/25 Pro uit na 2 sec ingedrukt houden.

**Functietoets**


Alle functiebeschrijvingen gaan ervan uit dat de Zenith15/25 Pro aan staat.



Toets	Functie
Functie	 <p>Houd de toets gedurende &lt; 1 sec ingedrukt.</p>
	<p>Schakelt de Zenith15/25 Pro tussen de rover- en basismodus.</p>
	<p>Houd de toets gedurende 3 sec ingedrukt.</p>
	<p>Werkt de coördinaten van de basispositie bij wanneer de Zenith15/25 Pro in de basismodus staat. Het LED-statuslampje van de RTK-basis knippert gedurende 2 sec. Wanneer er geen positie beschikbaar is, knippert het LED-statuslampje rood.</p>
	<p>Houd de toets gedurende 5 sec ingedrukt.</p>

NL

Toets	Functie
	<p>Maakt verbinding met het geconfigureerde RTK-basisstation of de NTRIP-server wanneer de Zenith15/25 Pro in de rovermodus staat. Het LED-statuslampje van de RTK-rover knippert gedurende 2 sec. Er gebeurt niets als de rovermodus niet is geconfigureerd.</p>

### 3

## Omgevingspecificaties

---

### Omgevingspecificaties

#### Temperaturen (°C):

Instrument:	-40 tot +65 (in gebruik)	-40 tot +80 (opslag)
ZBA201-batterij:	-20 tot +55 (in gebruik)	-40 tot +70 (opslag)

#### Bescherming:

IP68 (IEC 60529)

#### Trillingen:

Trillingstest in overeenstemming met ISO 9022-36-05

NL

**Schokken:**

Bestand tegen een val van 2 m, gemonteerd op een loodstaaf, op een hard oppervlak.

**Vochtigheid:**

100% condenserend

De effecten van condensatie kunnen worden tegengegaan door periodiek goed drogen van het instrument.

## 4

# Vervoer

---

### Vervoer in het veld

Bij vervoer van de apparatuur in het veld, er altijd zorg voor dragen dat u:

- het instrument draagt in de originele transportkoffer,
- of het statief draagt met de benen gespreid over uw schouders, onderwijl het instrument rechtop houdend.

---

### Vervoer in een wegvoertuig

Vervoer het instrument nooit losliggend in een auto; het kan dan onderhevig zijn aan schokken en trillingen. Vervoer het instrument altijd in de transportkoffer en zet deze vast.

Voor producten waarbij geen transportkoffer is meegeleverd, kunt u de oorspronkelijke of een vergelijkbare verpakking gebruiken.

---

### Verscheppen

Als het instrument per spoor, vliegtuig of schip wordt vervoerd, gebruik dan steeds de originele verpakking, transportkoffer of kartonnen doos van de

GeoMax of een gelijkwaardige verpakking om het te beschermen tegen schokken en trillingen.

---

**Vershipen, ver-  
voer van accu's**

Als accu's worden vervoerd of getransporteerd, dan moet de persoon die verantwoordelijk is voor het product, er op toezien dat aan de vigerende nationale en internationale regels en wetgeving wordt voldaan. Neem vooraf contact op met uw plaatselijke personen of vrachtvervoersbedrijf.

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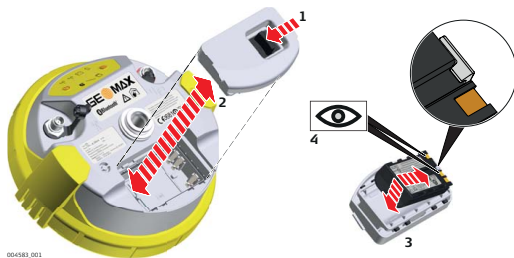
## 5

## Bediening



De accu moet worden geladen, voordat deze voor de eerste keer wordt gebruikt.

### Batterij vervangen, stap voor stap





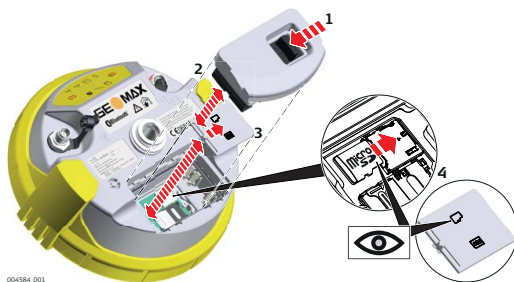
De batterij wordt in het onderste gedeelte van het instrument geplaatst.

1. Duw de schuifvergrendeling op het batterijcompartiment in de richting van de pijl met het open-slotsymbool.
2. Verwijder het deksel van het batterijcompartiment.
3. Schuif de batterij in de behuizing van het batterijcompartiment met de contactpunten naar boven gericht.
4. Druk de batterij naar beneden, zodat deze vastklikt op zijn plaats.
5. Plaats het deksel van het batterijcompartiment terug in het compartiment en duw de schuifvergrendeling in de richting van de pijl met het gesloten-slotsymbool.
6. Om een batterij te verwijderen, duwt u de schuifvergrendeling op het batterijcompartiment in de richting van de pijl met het open-slotsymbool en verwijdert u het deksel.
7. Duw de batterij enigszins omhoog en trek tegelijkertijd de onderkant van de batterij naar buiten. Hierdoor komt de batterij los uit de gefixeerde positie.




8. Verwijder de batterij.

Een microSD-  
kaart plaatsen,  
stap voor stap




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 Het verwijderen van de microSD-kaart terwijl het instrument nog ingeschakeld is, kan leiden tot verlies van gegevens. Verwijder de microSD-kaart en de aangesloten kabels alleen als het instrument is uitgeschakeld.

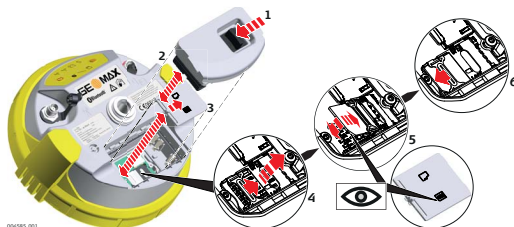
---

 De microSD-kaart wordt in een sleuf in het batterijcompartiment van het instrument geplaatst.

---

1. Duw de schuifvergrendeling op het batterijcompartiment in de richting van de pijl met het open-slotsymbool.
  2. Verwijder het deksel van het batterijcompartiment.
  3. Druk op de grendel van het deksel van de sim-/microSD-kaart en verwijder het deksel.
  4. Schuif de microSD-kaart met het logo naar boven stevig in de sleuf, totdat deze vastklikt.
-

## Een simkaart plaatsen, stap voor stap



- ☞ Het plaatsen/verwijderen van de simkaart, terwijl de Zenith15/25 Pro is ingeschakeld, kan de kaart permanent beschadigen. Plaats/verwijder de simkaart alleen als de Zenith15/25 Pro is uitgeschakeld.
- ☞ De simkaart wordt in een sleuf in het batterijcompartiment geplaatst.

1. Duw de schuifvergrendeling op het batterijcompartiment in de richting van de pijl met het open-slotsymbool.

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  2. Verwijder het deksel van het batterijcompartiment.

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  3. Druk op de grendel van het deksel van de sim-/microSD-kaart en verwijder het deksel.

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  4. Duw de simkaarthouder in de richting van de OPEN-pijl en klap hem omhoog.

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  5. Plaats de simkaart in de simkaarthouder met de chip naar de contactpunten in de sleuf gericht, zoals weergegeven op het sim-/microSD-kaartdeksel.  
Druk de simkaarthouder naar beneden.

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  6. Duw de simkaarthouder in de richting van de LOCK-pijl om hem te sluiten.
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