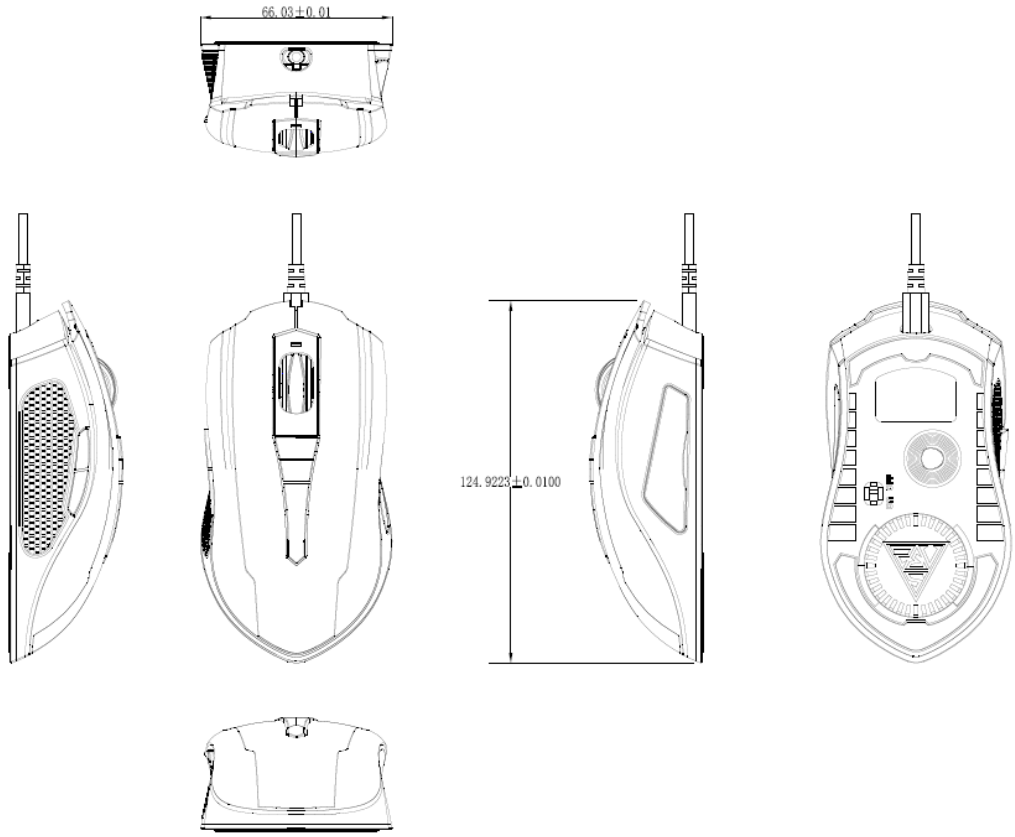
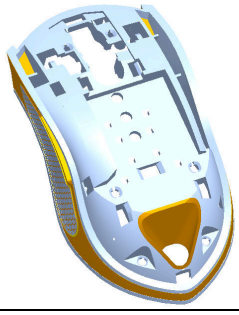
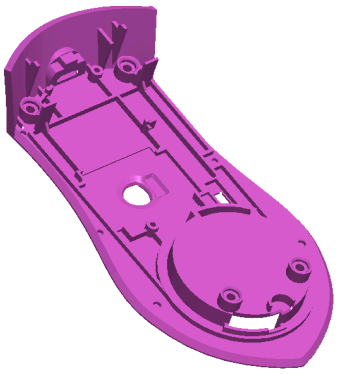
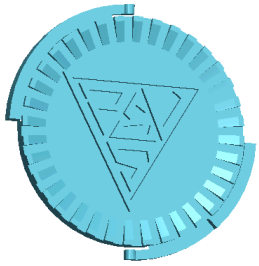
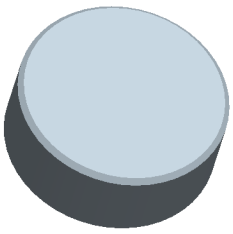
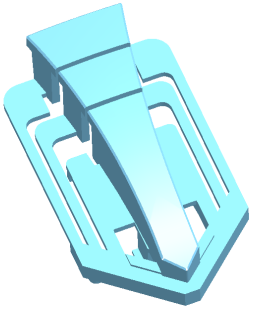
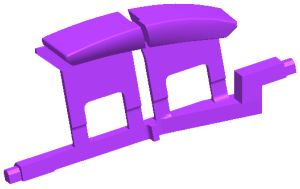
Mouse Hades M1 User manual

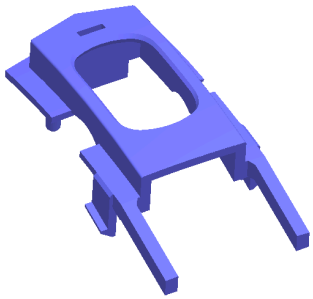
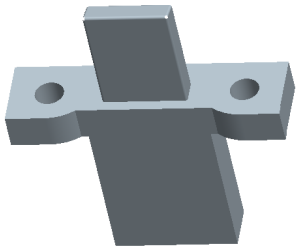
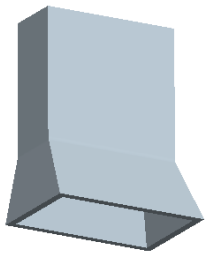
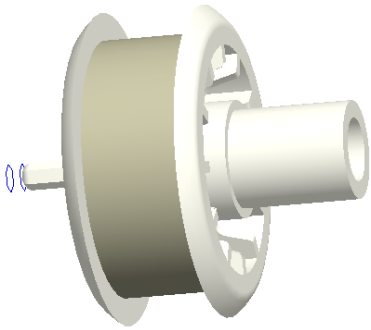
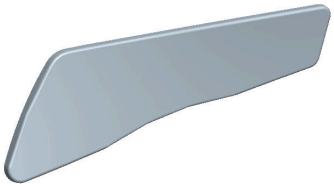
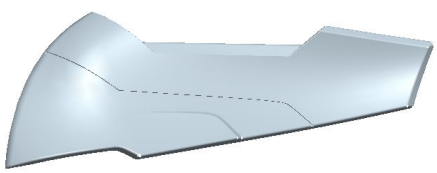
1. Introduction

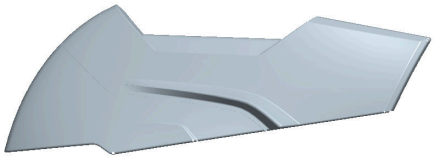
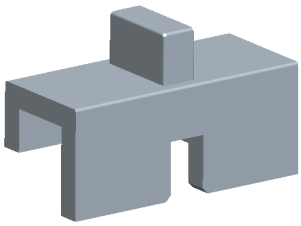
This document contains a functional and performance specification of the Wired / Wireless Dual Mode 3D 7K Optical Vertical Mouse。



Name	Picture	Spec.
Upper case		Material： ABS + PET Texture: Polishing

Button		Material：ABS + PC Texture: texturing
Bottom case		Material：ABS + PC Texture: texturing
Counterweight cover		Material：ABS Texture: texturing
Counterweight		Material：Stainless Texture: nickel plating
DPI		Material：ABS Texture: mirror polishing
Side key		Material：ABS Texture: texturing

3D Accessories		Material：ABS Texture: mirror polishing
Light guide		Material：ABS Texture: polishing
Lens Hood		Material：silica gel Texture: polishing
Scroll wheel		Material：PC Texture: polishing
Rubber gasket		Material：silica gel Texture: polishing
Side Cover-1		Material：ABS Texture: texturing
Side Cover-2		Material：ABS Texture: texturing

Side Cover-3		Material：ABS Texture: texturing
Switch		Material：ABS Texture: texturing

- Physical Specification
  - Dimension：

    Height:: 38.76±0.5mm

    Length:: 124.92±0.5 mm

    Wide: 66.03±0.5mm
  - Weight: around 134.8± 5g

Functional Key: left key、right key、middle key、advance、retreat、DPI、scroll

- Wire length: 1.8M (5wire) .
- Wire color: Black
- Joint: USB

- Mechanical Characteristics
  - Operating force of switches : 55 ~ 75 gf. (only switch)
  - Mouse switches operating force:: 70±20gf.
  - Scroll rotate force: 75±30 gf-cm
  - Scroll switch force: 180±40gf

Radio Characteristics

- **Mouse**
- VID:1B80 PID:B516
- Report Rate： 1000 -500-250-125HZ adjustale (Hold down the right + middle button to switch)
- SENSOR：ATG 4090
- MCU：CX52810
- lithium battery: 930mAh
- DPI: 600 red -1200 blue-2400 green(default)-3600 yellow-4800 orange -6000 purple
- charging current：280mA(MAX)
- Power Consumption：15mA（LED out） Standby：5mA（30 Min） sleep：0.5mA

- Wireless Consumption:150 mA (Max) wired mode：420MA（Max，with battery）
- The LED flashes red alarm when the battery voltage is lower than 3.6V , the indicator blinks once every 3 seconds, and when the voltage is lower than 3.3V,the mouse shut down automatically.
- DPI has storage function after switching
- When the mouse is plugged by Cable, it switch to wired mode and charge.
- Move performance
- **Resolution**: **600/1200/2400/3600/4800/**6000 DPI (X 和 Y direction)
- Max speed :150ips
- Max acceleration:30G
- Frame rate：8000fps
- Controllable sampling rate（according drive）：under 1/2 / 4ms respectively 1000/500 / 250HZ (default：500HZ/2ms reaction time）

● Environment

●6.1 Temperature

Temperature：0° C to 40° C；

Humidity：≤85%；

Shipping Temperature：-15° C- 60° C；

Shipping Humidity：≤85%；

● 6.2 Environmental test

6.2.1 High Temperature Test

Temperature：60±2° C；

Time：96 H；

Humidity：50±5% R.H.；

6.2.2 Low Temperature Test

Temperature：-15±2° C；

Time：96 小时 ；

Reliability Specifications

7.1 Mouse Life Test

Load: 100gf vertical force；

Speed: 200 ±40 mm/sec；

Travel: 300 km in any direction

7.2 Switch Life Test

Switching speed: 3 cycles/sec；

Operating force for left & right button: 90gf Max；

Operating cycles: 10，000,000 cycles ；

7.3 Switch Life Test

Switching speed: 1 cycle/sec；
Operating force : 75 ±30 gf-cm；
Operating cycles： 200,000 cycles；

7.4 High Temperature Test

Temperature： 60±2°C；
Time： 96 hours；
After this test the mouse shall be left in room temperature for 1 hour.

7.5 Low Temperature Test

Temperature： -15±2°C；
Time： 96 hours；
After this test the mouse shall be left in room temperature for 1 hour.

7.6 Moisture Test

Temperature： 40±2°C；
Humidity: 90~95% R.H.；
Time： 96 hours；
After this test the mouse shall be left in room temperature for 1 hour.

7.7

Temperature： -15±2°C for 1 hour and then 60±2°C for 1 hour；
Operating cycles: 5 cycles；
After this test the mouse shall be left in room temperature for 1 hour.

7.8 Drop Test

Times of Drops: 6 times；
Height: 70±5 cm；
Direction: 5 faces.
Floor surface: Plastic floor tile；

7.9 Wire swing test

Swing speed 30 cycle/min；
Load： 100 g；
Swing angle： ±60°；
Swing times： 8000 (Min.)；

Determination of Reliability Tests: Because each test is destructive, each test requires independent sampling. After each test sample can work normally is judged to pass the test.

FCC Warning

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions

(1) this device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note 1: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.