



Sphaericae



TechSpiderbot

[VIEW IN BROWSER](#)

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Summary

Sphaericae designed as a free spirit droid for exploring...

[Hobby & Makers](#) > [RC & Robotics](#)

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Information

Sphaericae is a free spirit droid who like exploring rooms and objects within. When she finds new objects she like to go back and forth around. Her emotions are visible by her rolliing behavior and moving eye. One of her characters is feeling lonely, which is noticeable by her spinning movements. Sphaericae like to play hide and seek so now and then....

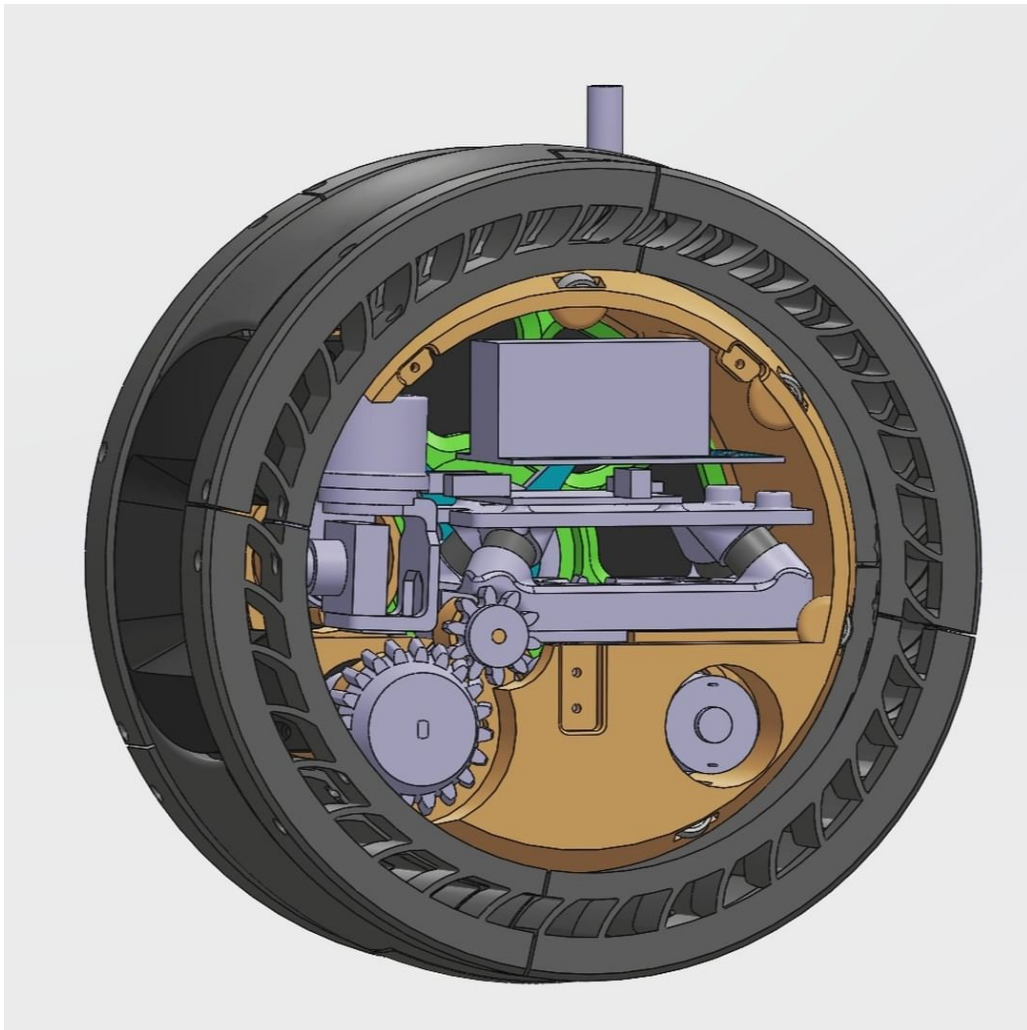
Sphaericae platform can run stand alone or being RC controlled with FPV capabilities

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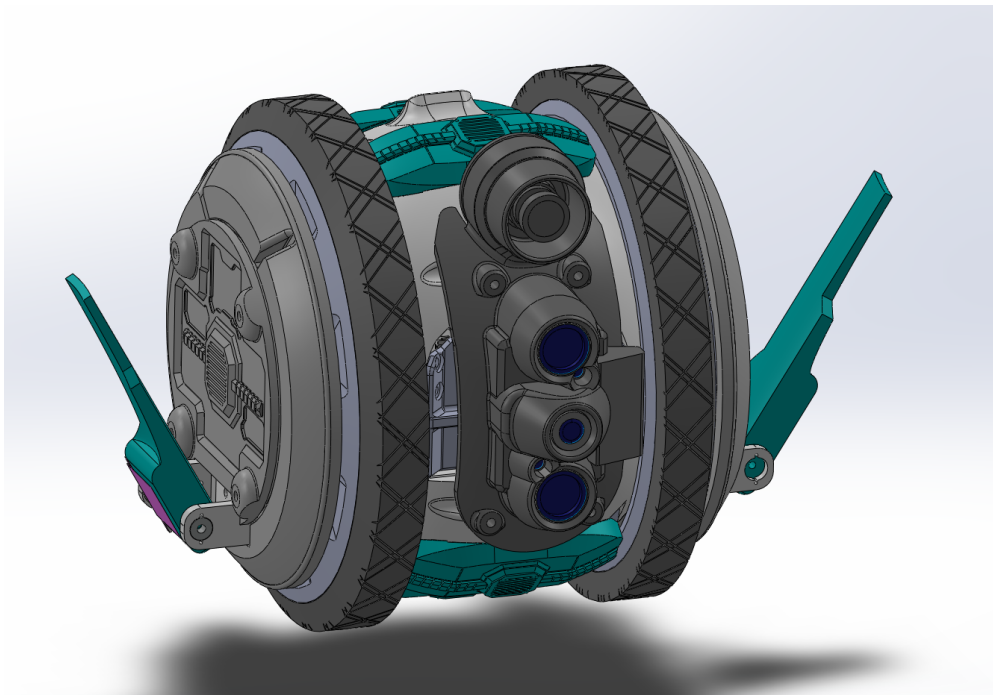
Update log:

- 2022 Mrkl

- Max Height; 229mm
- Layout; Bulky
- Design status; Scrapped



- 2024 MarkII (height reduction of 35mm)
- Max Height; 194mm
- layout; Slim
- Design status; Released
- MarkII - 2 (height reduction of 23mm)
- Max Height; 181mm
- layout; Optimized
- Optimizing wiring accessibility and removing unnecessary parts
- Design status; Testing



(End Goal)

- MarkIII
- Max Height; 100mm
- layout; Compact
- Design status; Not Released

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Part List MrkII

#	Description	Spec	Amount
1	Cam	Pi Camera	1
2	Various imbus screws	M3 (lengths 6/10/12/40)	various
3	ACCU	NiMH_52x32_30_1700mAh	2
4	Arduino_MKR_Motor_Carrier + IMU + controller	-	1
5	BB ball (Wheels_v1)	6mm	16

6	Thrust bearings (Wheels_v2)	F8-22M	2
7	Wheel bearing	6809_bearing45x58x7	2
8	DC Motor with encoder	JGB37-545	2
9	Brass coupling	Custom adjusted	2
10	Gear bearing	M4	12
11	Cooling fan (FPV module)	40x40	1
12	FPV Camera transmitter	-	1
13	RC reveiver	-	1
14	Mini servo	MG92S	2

Model files


Chassis
5 files


a_chassis_main_part1_x1.stl


a_chassis_main_part2_x1.stl



lw_bot-shell-intercable_x1.stl



lw_eye-shell-intercable_x1.stl



lw_pow-shell-intercable_x1.stl



Gymbal

8 files



a_gymbal-and-telemerty-bracket_1x.stl



petg_extended_arm_bracket_1x.stl



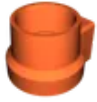
a_gymbalspring_x1.stl



a_gymbal_elbow_x1.stl



a_gymbal_mountarmt_x1.stl



c_cam_bracket_x1.stl



c_cam_bracket_backplate_x1.stl



c_cam_bracket_underplate_x1.stl



Wheels_v2 (Thrust bearing)

7 files



a_chassis_wheel_mount_x1.stl



a_planitairy_gear_v2_x2.stl



a_planitairy_gear_dustcover_x2.stl



a_sun_gear_v2_x2.stl



tpu_wheel_tires_v2_x2.stl



c_sideplate_rc_antenna_v2_x1.stl



c_sideplate_cam_antenna_v2_x1.stl



Wheels_v1 (BB-Ball Bearing)

6 files



a_wheel_sidebaring_x2.stl

☐ BB-Ball Baring



a_sun_gear_x2.stl



c_wheel_tires_part1_x2.stl



c_wheel_tires_part2_x2.stl



c_sideplate_rc_antenna_x1.stl



c_sideplate_cam_antenna_x1.stl



Electronics Bracket and Shock-Absorbers

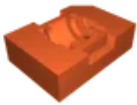
7 files



a_shockabsorbe_mold_x1.stl



a_pcb_bracket_x1.stl



a_shockabsorbe_molda_x1.stl



a_shockabsorbe_moldc_x1.stl



a_shockabsorbe_moldb_x1.stl



a_chassis_pcb_bracket1_x1.stl



a_chassis_pcb_bracket2_x1.stl



Test Stand

3 files



a_display-stand_1x.stl



a_r02-bottom_x1.stl



a_r02_top_x1.stl



Hardware Components

15 files



accu_nimh_52x32_30_1700mah.step



6809_bearing45x58x7.step



jgb37-545.step



6mm-bb.step



arduino_mkr_motor_carrier.step



cam.step



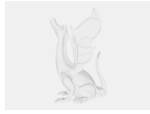
m3_imbus_12mm.step



m3_imbus_6mm.step



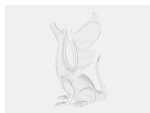
m3_imbus_10mm.step



fan_40x40.step



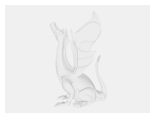
shock_absorber.step



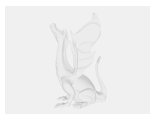
m4_barring.step



wt61-5-a-3-compass.step



m3_imbus_40mm.step



mg92s_servomotor.step

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