

# HERON® LITE Color

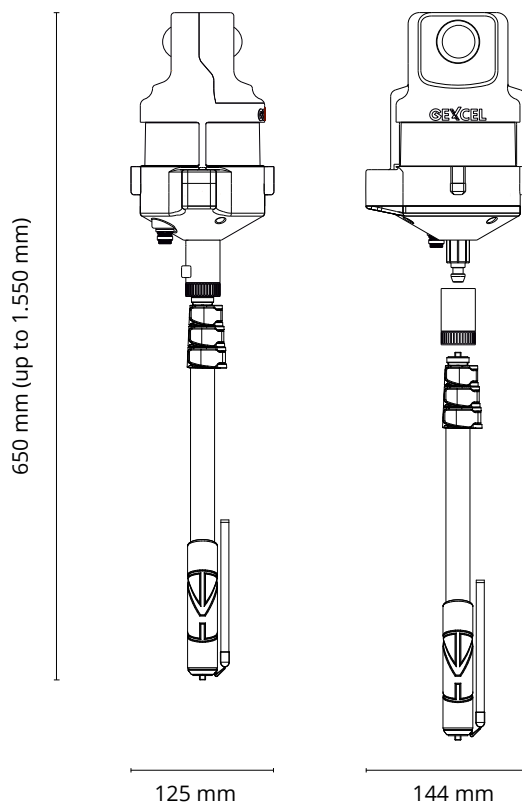
## Product Specifications

### MAIN FEATURES

Suitable environment	indoor/outdoor
Handheld	yes
Wearable	on request
Mountable on various mobile platforms (car, trolley, bike, quad, boat)	yes
No. LiDAR sensors	1
Panoramic camera	yes
IMU	yes
SLAM post-processing software (HERON Desktop)	yes
Point cloud advanced processing software (Reconstructor)	yes
Free tool for 2D map measuring (GoBlueprint)	yes
Output data	.e57, .las, .ply, export to ReCap
Points per second	300.000
Local accuracy	~ 3 cm
Max survey resolution	~ 2 cm
Global accuracy	~ 5 cm in short close rings <sup>(1)</sup>
Loop closure	not mandatory
Working in every light conditions	yes
Initialization and calibration procedures	not required
Single operator	yes
Working hours (in continuous acquisition)	~ 3 h
Real-time 3D point cloud visualization	yes
Control points	yes/on demand
Operating temperature	-10° ; +45°
Storage temperature	-40° ; +60°
Transport case	yes

### CAPTURE HEAD

Laser sensor brand and type	Velodyne Puck
No. of sensors	1
Laser safety classification	class 1
Laser wave length	903 nm
Laser max range	80-100 m
FOV	360° x 360° <sup>(2)</sup>
Panoramic camera	yes
IMU	yes
Weight	1165 g
Dimension	125 x 144 x 240 mm



### CAMERA

Panoramic camera	yes
On demand image acquisition at 5K (5640x2820 pixel)	yes
FOV	360° x 360°
Depth of focus	from 40 cm to ∞
Focal length	35 mm ≅ 1.036 mm
Automatic color and light balance	yes
Automatic exposure control	yes

### TOUCHSCREEN CONTROL UNIT

Processor	i7
Weight	1400 g
Dimension	314 x 207 x 25 mm
Storage and Memory	256 GB
Waterproof protection	IP65
Shoulder harness	282 g
Screen dimension	11,6" IPS LumiBond 2.0

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### HANDHELD POLE

Weight (pole and cables)	965 g
Dimension	from 40 to 130 cm

### BATTERY

Model	Lithium lion 12V 4Ah
Weight	410 g
Dimension	22 x 176 x 78 mm
Belt with battery holder	yes

### ACCESSORIES

Telescopic pole with cables (from 90 to 200 cm   1000 g)	available
Car mount	available
Rugged backpack (500 x 370 x 190 mm   4280 g)	available
Rugged backpack <i>Plus</i> (540 x 400 x 220 mm   5000 g   wired)	available
Ring LED Light (36W   700 g)	available

### SOFTWARE EQUIPMENT

<b>Reconstructor</b>	included
<b>Reconstructor HERON add-on</b>	included
Automatic scans registration	yes
Direct data import	colorized .fls, .zfs, .rxp, .3dd, .x3s, .x3m, .clr, .cl3, .dp, .ixf, .nctri, .txt, .las, .laz, .e57, .ptx, .pts, .asc, .ply, .csv
Point cloud filtering, managing and classifying	yes
Import .ifc BIM format	yes
Import terrestrial laser scanner data	yes
Import UAV data	yes
Import mobile mapping data	yes
Import projects from third parties LiDAR software	FARO Scene, RIEGL RiSCAN PRO, TOPCON, Z+F LaserControl (thermal camera included)
Export to ReCap Pro	yes
Cross sections and profiles extraction (.dxf)	yes
Orthophotos & x-ray orthophotos (direct export to AutoCAD)	yes
Volumes and areas calculation	yes
Mesh creation and manipulation	yes
Verification tool	yes

<b>HERON Desktop</b>	included
Drift effect reducing (global optimization)	yes
3D local maps algorithm	yes
GNSS coordinates for geolocalization	yes
Split/merge trajectories and point clouds	yes
Automatic post-processing mode	yes
Noise cleaning (attenuation)	yes
Mobile objects removing	yes

<b>GoBlueprint</b>	FREE TOOL
Volume calculation based on 2D map	yes
2D map measures (linear, angular, area)	yes
Onsite 2D map navigation (Windows-based pc/tablet compatibility)	yes
Deliverables easy to manage and share	yes

<b>HERON Constraints add-on</b>	optional
<b>Reconstructor MINING add-on</b>	optional
<b>Reconstructor COLOR add-on</b>	optional
<b>Reconstructor 3D Viewer</b>	FREE TOOL
<b>ClearEdge3D EdgeWise</b>	optional
<b>ClearEdge3D Verity</b>	optional
<b>Bentley-Orbit 3DM Cloud</b>	optional
<b>Bentley-Orbit 3DM Feature Extraction</b>	optional

(1) The global accuracy depends on the effectiveness of the SLAM registration algorithm, which can be influenced by the geometry of the surveyed environment. Long trajectories in absence of loop closures and cross paths, as narrow tunnels or narrow stairs, can downgrade the global accuracy to 20-50 cm. The patented and unique algorithms present in HERON® Desktop and the use of control scans as constraints can dramatically improve the quality of the result. Gexcel support team is ready to provide more detailed information on this topic.

(2) FOV guaranteed by walking with the system (nominal sensor FOV - horiz. 360° | vert. +15° ; -15°).

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