Large scale
scan-on-the-go
mobile mapping
solution

dConstruct
R O B O T I C S
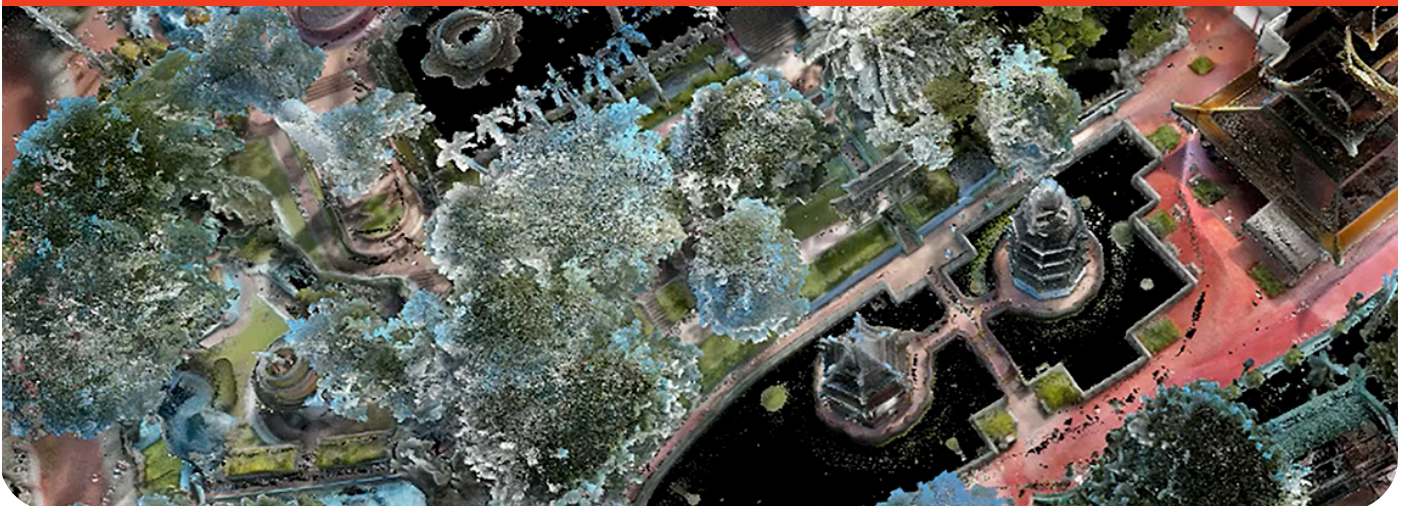
d.ASHPack 1.2

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d.ASH Pack is an end-to-end 3D mapping solution developed by dConstruct using state-of-the-art SLAM technologies.

It is fully man-portable or can be mounted on a robot. It operates with motion stabiliser on-the-go both indoor and outdoor. d.ASH Pack can handle large areas with its long battery capacity.

3D colour point cloud collected are useful for digital twin and the data can be easily organised for robots to navigate autonomously anytime, anywhere.

Key Components

- **IMU**
- **Ouster Lidar**
- **Computing System**
- **4 Cameras**
- **Efficient battery**

d.ASH Go | d.ASH Pack Support Application

Now you can now easily connect your d.ASH Pack to Xplorer with stream 3D coordinate data directly. This allows for real-time optimizations of the scanning trajectory, minimizing the need for re-scanning.

Control Unit

1 TB SSD Hard disk with USB 3 interface, IMU, Ethernet and wireless connection available.

Service support available through remote connection.

Indoor/Outdoor Operation

High Performance 3D Mapping

Motion Stabiliser

Fast Scan On-The-Go Mobile Mapping

3D Coloured Point Cloud Acquisition

3 Hrs+ Operation Time

Smart Construction

Periodically capture data efficiently to document changing construction sites and achieve frequent milestones. Monitor construction site easily to meet timelines and deliver an as-built 3D point cloud and image dataset after the building construction is completed.

Safety & Security

Scanned data can be used to detect potential threat to prevent accident. By monitor and manage potential safety risks and prevent overcrowding or congestion. Emergency planning and response can help improve safety, security and efficiency in wide range of industries and scenarios.

Academia & Research

Generated data not only providing accurate digital representations of the physical environment but also can be used to monitor and analyze changes. It can also facilitate training and testing of artificial intelligence, enabling advanced computer vision techniques that can be integrated into various needs.
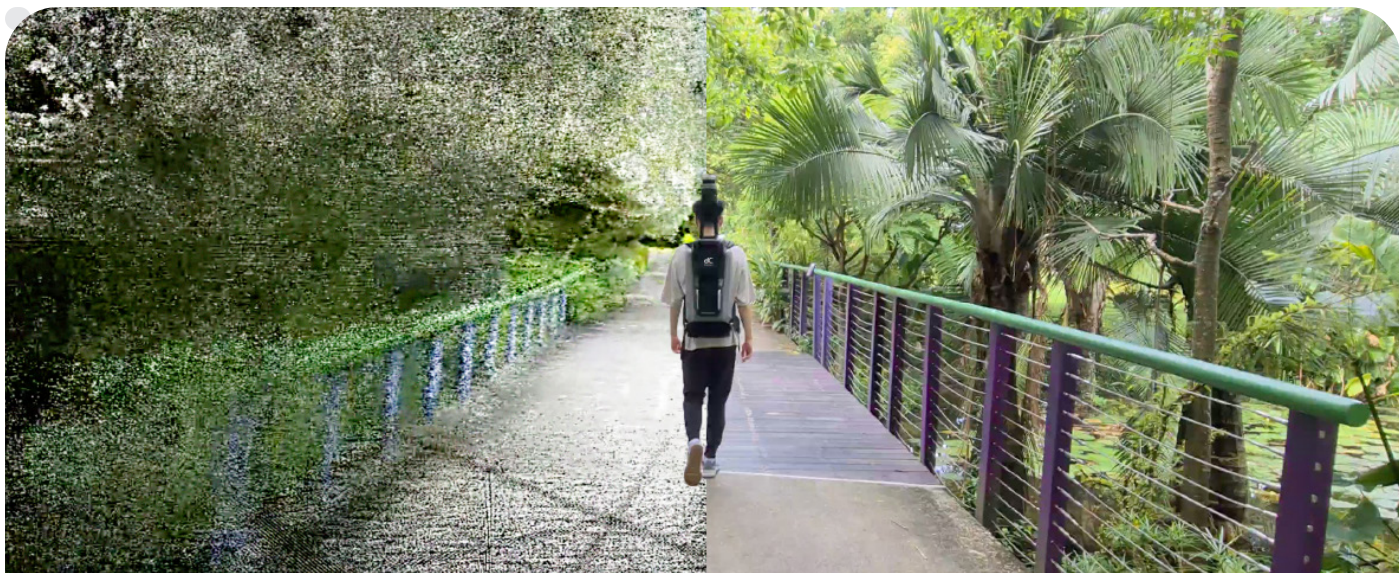
Core Specifications

SLAM / DATA Scanner

Laser Scanner Model	Ouster OS1 REV6 Channel 32
FOV Horizontal / Vertical	360° / 45° (+22.5° to -22.5°)
Points Per Second	655,360
Laser Range	Up to 120m
Range Accuracy	±3 cm for lambertian targets, ±10 cm for retroreflectors
Point Cloud	Binary LAS 1.2. ,E57, PCD, XYZ file format, XYZ RGB values Colourisation by camera pictures, Mesh export in PLY, GLTF

Camera Sensors

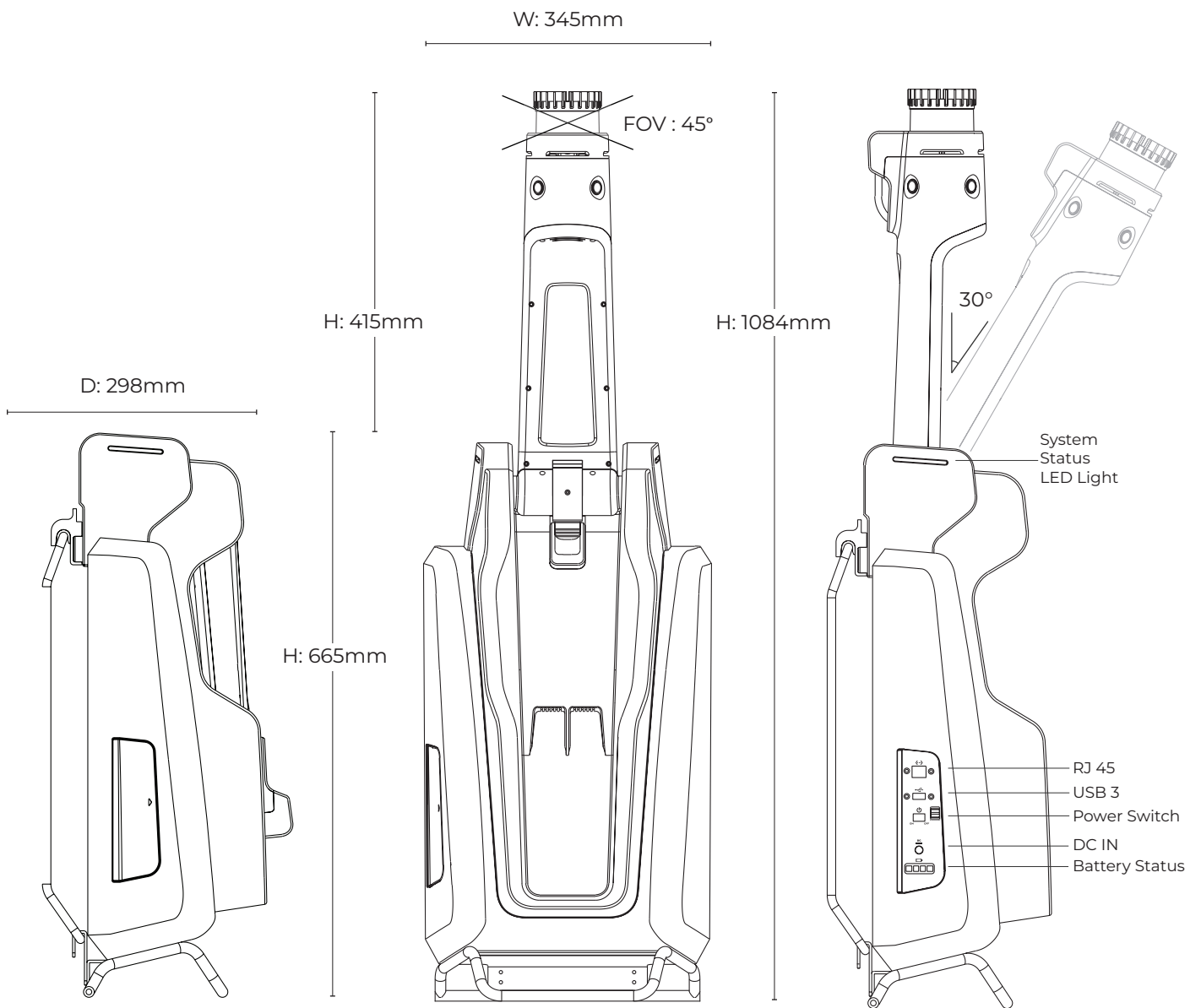|	
Number of Camera	4
Positioning Solution	SLAM
Stream	1280x720 @ 10fps
Control Unit	1 TB SSD Hard disk with USB 3 interface, IMU, Ethernet and wireless connection available. Service support available through remote connection.

Battery

Battery Liftspan	3 Hour
Charging Time	3 Hour
Input Voltage	29.4V
Battery Capacity	6.4Ah@ 25.9V(165WH)

Sensor Platform

Body Material	Nylon, Metal, leather, Wood, Foam
Strap Material	Nylon, Foam
Weight	11.5kg

Product Dimensions

W: 345mm

FOV : 45°

H: 415mm

D: 298mm

H: 1084mm

30°

System
Status
LED Light

H: 665mm

RJ 45

USB 3

Power Switch

DC IN

Battery Status

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dConstruct Robotics
10 Central Exchange Green #03-01
PIXEL Singapore 138649