

NEW PRODUCT

TDOT GREEN™  
DRONE LASER SYSTEM



GREEN LIDAR

The one and only green LiDAR system for both land and shallow water

Surveying object

- GREEN LiDAR
- Visible CAMERA 3840x3046 12.4Mpixel
- Thermal CAMERA 640x512pixel (OPTION)
- LTE EQUIPPED
- WEIGHT 3.6kg

- Land area
- River area
- Shallow-sea area
- Wet ground surface

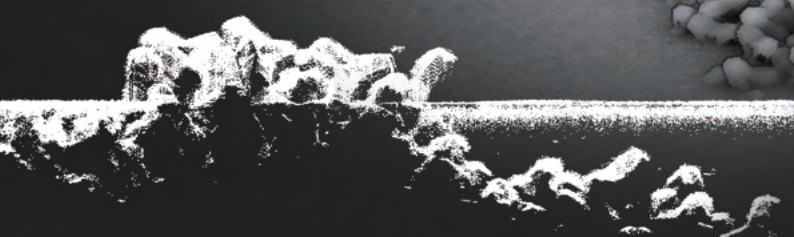


Coastline wave-dissipating block

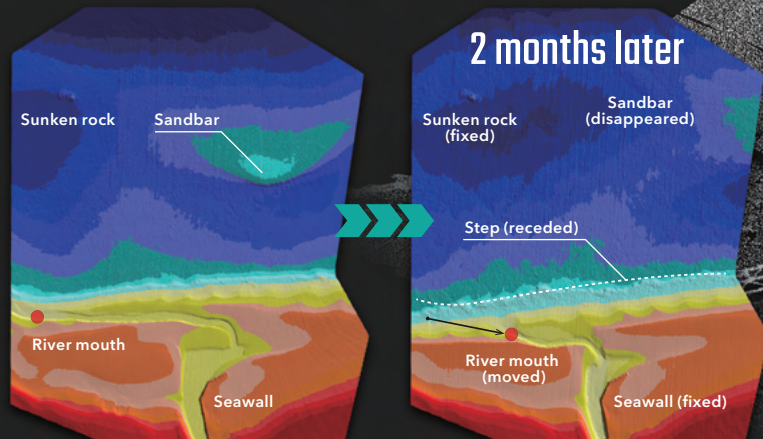


Vegetation covered area on land

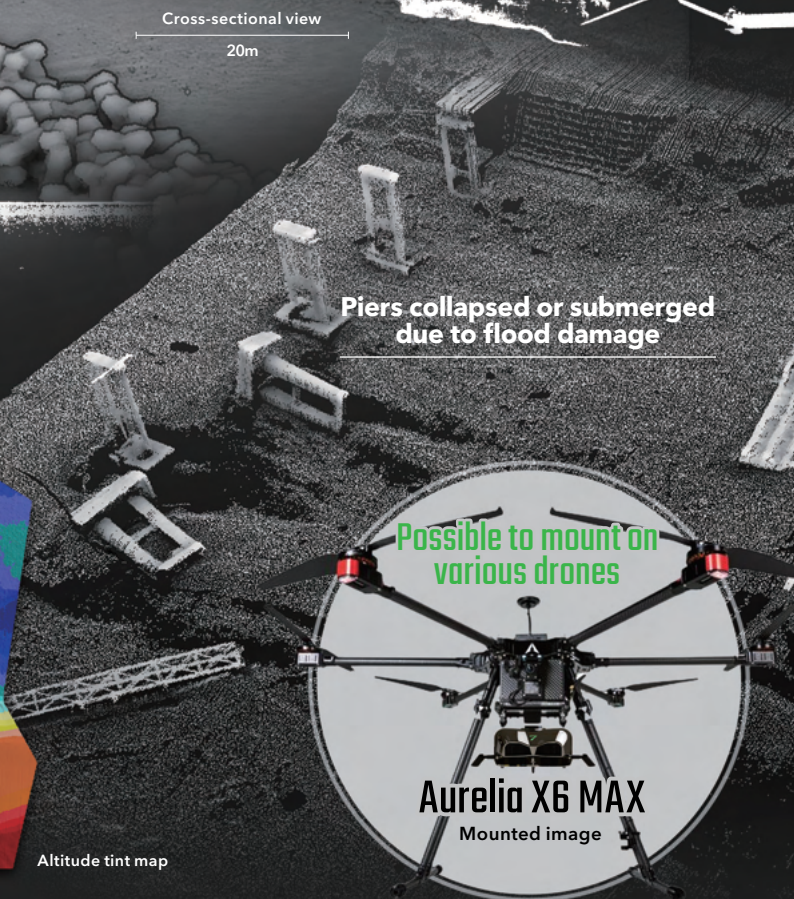
Cross-sectional view 20m



Comparative verification of seashore topography



Altitude tint map



Piers collapsed or submerged due to flood damage



Possible to mount on various drones

Aurelia X6 MAX Mounted image

## TDOT 7 Series Specifications



**TDOT NIR**  
DRONE LASER SYSTEM

# 7

### General purpose LiDAR system

Laser unit  
**RIGLE miniVUX-3UAV**

Pulse rate : 300,000Hz  
Scanning speed : 100Line/sec.  
FOV : 360°, 180°, 120° variable  
Number of echoes : 5  
Laser wavelength : Near infrared

Vegetation covered area

Water surface

Ground surface



**TDOT NIR-S**  
DRONE LASER SYSTEM

# 7

### Ultra high speed LiDAR system

Laser unit  
**RIGLE VUX120<sup>23</sup>**

Pulse rate : 2,400,000Hz  
Scanning speed : 400Line/sec.  
FOV : 100°  
Number of echoes : 32  
Laser wavelength : Near infrared

Vegetation covered area

Water surface

Ground surface



**TDOT GREEN**  
DRONE LASER SYSTEM

# 7

### Land/shallow water area LiDAR system

Laser unit  
**amuse oneself** Original module

Pulse rate : 160,000Hz  
Scanning speed : 80Line/sec.  
FOV : 120°  
Number of echoes : 6  
Laser wavelength : 532nm GREEN

Vegetation covered area

Water surface

Ground surface

Bottom of water

Cross-sectional view



Green laser  
for depth measurement  
made by other company

approx. **40°**



**FOV**  
Extensive data acquisition

Land/shallow water area green LiDAR

**TDOT 7 GREEN**  
**120°**

## SPECIFICATION

Size (approx.)	W250xD310xH135mm
Weight (approx.)	3.6kg
Maximum Range in the air	≥10% 430m ≥100% 1400m
Minimum Range	2.5m
Resolution	1mm
Statistical error(1σ)	Strong echo signal: 4mm Weak echo signal: 15mm
Accuracy	5mm
Divergence in scan direction	1.5mrad
Laser wavelength	532nm
Laser pulse rate	160,000Hz
FOV	120°
Scanning speed	80Line/sec.
Number of echoes	6
Laser class	altitude > 35m: class 3R altitude < 35m: class 1(Laser safety)

Sounding Ability  
Best case R=0.4\* @50m altitude 1.43 Secchi  
Working temperature range 0~40°C (No condensation)

### INS specification\*2

Positional accuracy	5mm
Heading	0.03°
Pitch/Roll	0.006°
Speed	0.01m / sec.

\*1 R=Reflectivity

\*2 This is the accuracy after post-processing with the "POST-PROCESSING CLOUD" cloud service. An additional contract is required to use the service.

## MODEL CHANGE Significant Evolution

CURRENT MODEL

**TDOT 3 GREEN**

Water surface

Bottom of water

NEW MODEL

**TDOT 7 GREEN**

Water surface

Bottom of water

Cross-sectional view



No.2401, Shin-Daibiru, 24F  
1-2-1 Dojimahama, Kita-ku, Osaka, 530-0004, Japan

<https://amuse-oneseff.com/en/>  
MAIL [info@amuse-oneseff.com](mailto:info@amuse-oneseff.com)  
PHONE +81-6-6341-0207

These include pre-sale promotional information, and specifications, appearance, etc. are subject to change without notice.



WEB



MAIL