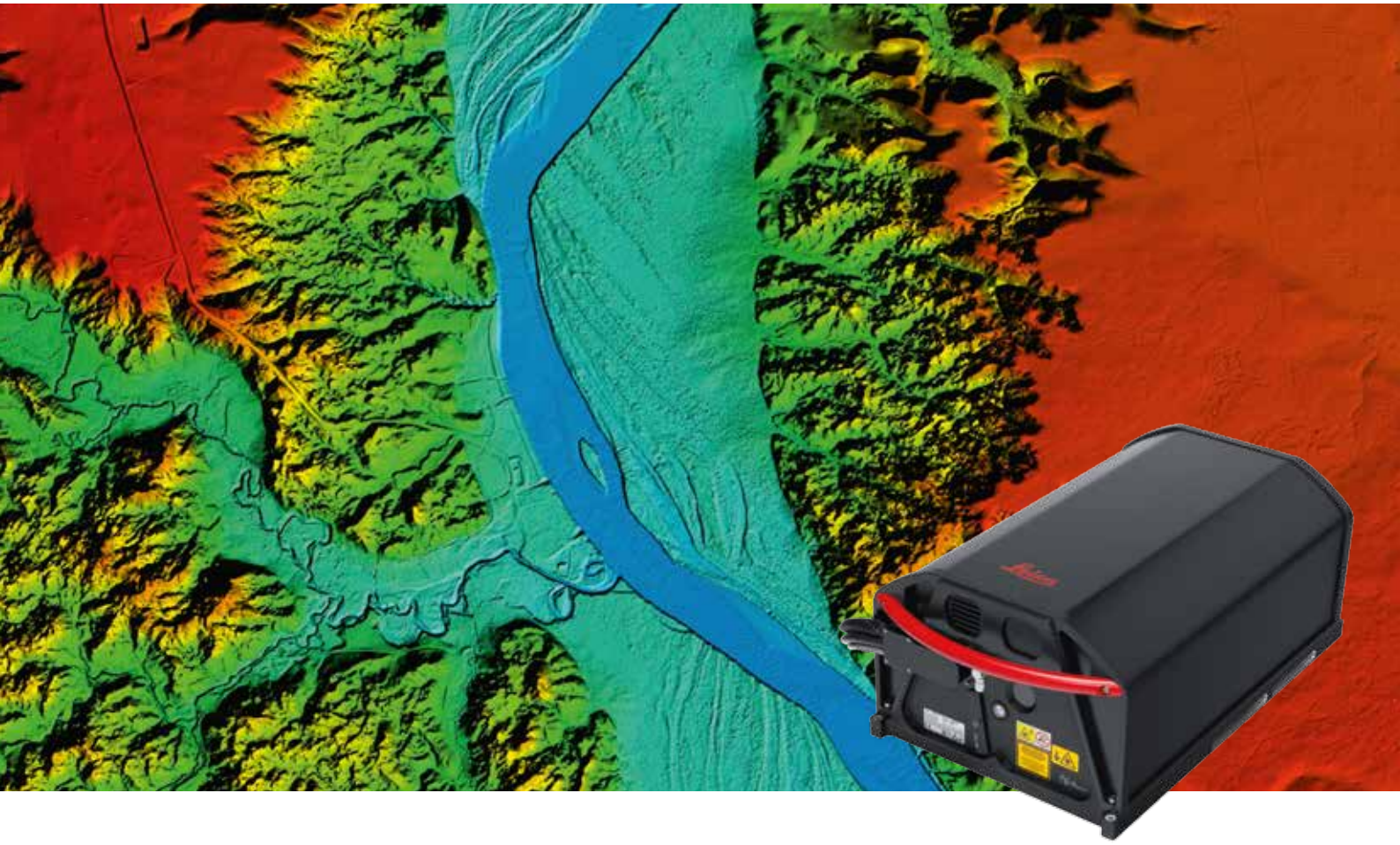
Leica ALS80
Fast & flexible airborne LiDAR sensor



Efficiency from low to high altitudes

The affordable Leica ALS80 LiDAR system features industry leading 1.0 MHz pulse rates and allows you to produce high-density point clouds for general purpose mapping in a fraction of the time. Perform high-AGL mapping with nearly 8 km swath and with the fastest acquisition rates at all flying heights, even on low reflectivity targets.

Ultimate flexibility

Three planar scan patterns give you control over all scanning parameters, meeting the most challenging data acquisitions with efficiency and accuracy. Acquire even point density across the swath and set any field of view from narrow to wide. Ultra-low beam divergence enhances accuracy and foliage penetration. Look into the deepest canyons, densest forests and across the widest plains.

Most widely used topographic LiDAR sensor

Over a couple of hundred units in service make the Leica ALS80 field proven in every corner of the world. It is used for county and state-wide mapping, damage assessment, forestry and extreme terrain mapping in all environments and at temperatures of up to 40 °C. Its modular construction allows the Leica ALS-CM to be upgraded to ALS-HP or ALS-UP and expand to state-of-the-art, ultra-high density performance.

Leica ALS80 product specifications

MAIN PERFORMANCE SPECIFICATIONS

	Model		
	ALS80-CM	**ALS80-HP**	**ALS80-UP**
Maximum flying height (m AGL) [1] **Minimum flying height (m AGL)** **Maximum measurement rate (kHz)**	1,600 100 1,000	3,500 100 1,000	5,000 100 1,000
Field of view Degrees, full-angle, user-adjustable	0 - 72		
Roll stabilisation Automatic adaptive, degrees	72 – active FOV		
Scan patterns User selectable	Sine, triangle, raster		
Maximum scan rate (Hz) Sine Triangle Raster	 200 158 120		
Number of returns **Number of intensity measurements**	Unlimited 3 (first, second, third)		
Storage media	Removable 1,200 GB SSD		
Storage capacity Hours @ max pulse rate, 2 returns	10.3		

PHYSICAL SPECIFICATIONS (UNMOUNTED)

	All models
Size (cm), weight (kg) Scanner Control electronics	 37 W x 68 L x 26 H cm, 47 kg 45 W x 47 D x 25 H cm, 33 kg
Operating temperature (°C) Scanner Control electronics	 0 °C – 40 °C cabin side temperature (35 °C for ALS80-UP) 0 °C – 40 °C
Flight management	Leica FlightPro with OC60 operator console and PD60 pilot display
Power consumption Nominal, including FWD option	922 W (1006 W for ALS80-UP) @ 22.0 – 30.3 VDC

Leica CloudPro

Leica CloudPro offers users an efficient way to process data, fast – without the need to upload additional software packages. Process large point clouds in the desired format and projection, even on a mobile computer in the field.

Leica LSS Viewer

Leica LSS Viewer provides the speed and functions you expect from a professional point cloud viewer allowing you to find what you're looking for by elevation, intensity, return number, attached RGB value or classification. Leica LSS Viewer lets you zoom and roam with speed and agility.

[1] Assumes 10% diffuse reflective target

Invisible laser radiation, avoid eye or skin exposure to direct or scattered radiation. Class 4 laser product in accordance with EN/IEC 60825-1:2014.

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- when it has to be **right**

Leica Geosystems