

MMATIDIA

A NEW LOOK AT LIDAR

Q1

LONG-RANGE 3D IMAGING WITH METROLOGY ACCURACY



A BREAKTHROUGH IN OPTICAL METROLOGY

THE NEXT GENERATION OF 3D METROLOGY

- ◇ Fast point-cloud acquisition for metrology and inspection
- ◇ No need for markers or manual intervention
- ◇ Long range and high distance accuracy

The long range and speed of Ommatidia's Q1 permits usage in contexts where standard optical metrology techniques such as trackers cannot be applied.

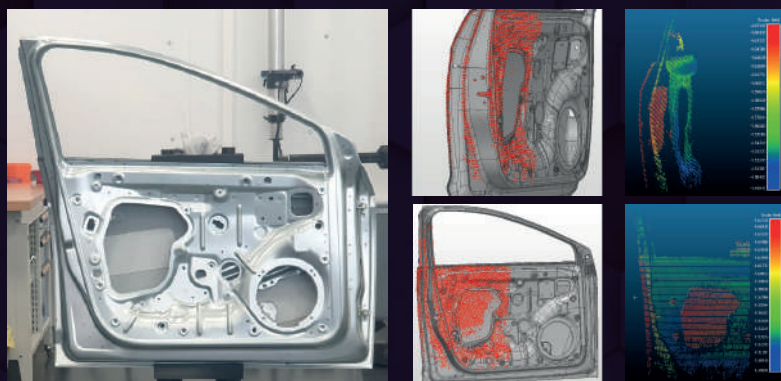
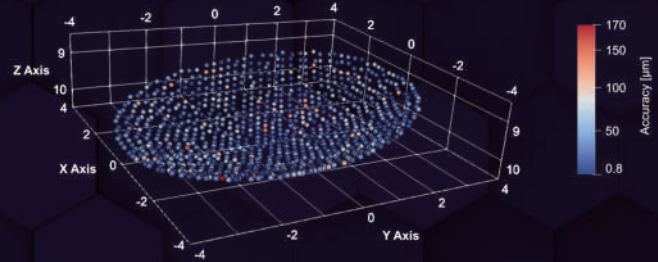
It provides the range and usability of a **laser scanner with metrology grade accuracy.**

Unique Features

- ◇ Long range
- ◇ Metrology grade accuracy
- ◇ Dense point clouds
- ◇ Dynamic vibrometric analysis

Broad Applicability

- ◇ Automatic object scanning
- ◇ Compatible with industrial software
- ◇ Ease of use and connection
- ◇ Portable and rugged



YOUR INDUSTRY 4.0

- ◊ Ommatidia's Q1 connects the real and the digital world
- ◊ Support for integration into different industries
- ◊ Solution development to convert data into value

Digitalization of industry demands high quality 3D data about products and processes. Ommatidia provides it together with the support required to transform it into customer value. This is done through in-house capabilities and a world-class network of partners.

Industries

- ◊ Aerospace
- ◊ Energy production and distribution
- ◊ Automotive
- ◊ Telecommunications
- ◊ Civil engineering & construction



Applications

- ◊ Product and process quality control
- ◊ Predictive maintenance
- ◊ Structural analysis
- ◊ Reverse engineering



Outputs

- ◊ CAD data
- ◊ Vibration mode analysis
- ◊ Product inspection sheets
- ◊ BIM & decision support models



SPECIFICATIONS

Parameter	Value	Unit
Measurement range	0.5 – 40	m
Points per line	128	points
Acquisition speed	512 - 20.000	points/sec
Measurement accuracy (MPE)	20+6µm/m	µm
Angular range	30x360	°
Vibrometry sampling freq.	35	kHz
Vibrometry max in-band velocity	7	mm/s
Power consumption	45	W
Battery (external) operation time	180	min
Interface	Ethernet / WiFi	
Format	CSV/VKT/STL/PLY/TXT	
Mount	Thread 3 ½	Inch
Dimensions (w/o battery)	150x220x380	mm
Weight (w/o battery)	7.5	kg
Pointer	~633	nm
Atmospheric compensation	Pressure, temperature, humidity effects to MPE	
Temperature range (operation)	0/40	°C
Environmental protection class	IP54	
Eye safety	Class 1M	
Wavelength	1.55	µm
Geotagging	GPS	



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