



Laser Scanner IMAGER 5006Ex

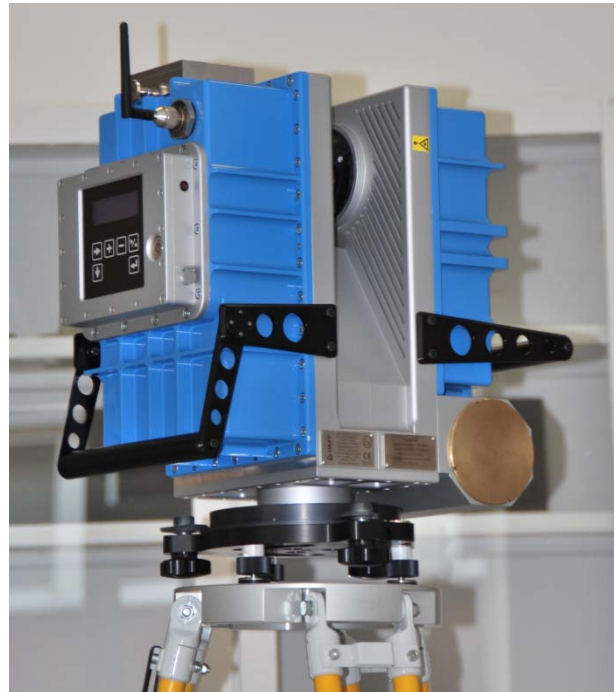
The Safe Way of Measuring in Explosive Atmospheres

The **IMAGER 5006Ex**¹ revolutionises measuring in explosive atmospheres. **DMT** offers a wide range of services with **IMAGER 5006Ex**, especially in underground mining and sewerage systems with numerous advantages that not only increase safety and productivity but also reduce costs.

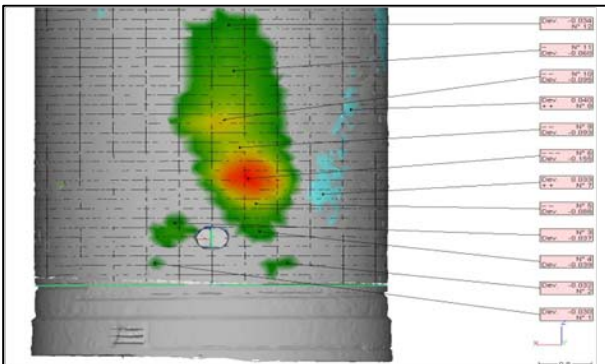
Tasks

- As-built documentation
- Safety inspections
- Accident and damage analysis
- Deformation analysis
- Acceptance inspection of contractual work
- Volume calculation and variance comparison
- Bottleneck analysis
- Geological rock face survey

¹ certified by ATEX for Category M2 in Group I (mining) and Category 2 in Group II B (other industries)



IMAGER 5006Ex



Deformation monitoring of a power plant flue



Point cloud of a pumping station in an underground coal mine

Laser measuring system	
Ambiguity interval ¹⁾	79 m
Min. Range ²⁾	0,4 m
Resolution range	0,1 mm
Range drift over temp (-10°C – +45°C)	Negligible due to internal reference

Optical transceiver	
Laser	Visible
Laser safety class	3R (EN 60825-1)

Deflection unit	
Field of view vertical	310°
Field of view horizontal	360°
Resolution vertical	0,0018°
Resolution horizontal	0,0018°
Accuracy vertical	± 0,007°rms
Accuracy horizontal	± 0,007°rms
Max. scanning speed vertical	≤ 50 rps
Typ. scanning speed vertical	25 rps

Resolution		
Resolutions	Pixel / 360° (vertical, horizontal)	Scanning time / 360°
preview	1.250	25 sec
middle	5.000	1 min 40 sec
high	10.000	3 min 22 sec
super high	20.000	6 min 44 sec
ultra high	40.000	26 min 40 sec
max. resolution for selections	100.000	depends on selection

Miscellaneous	
Data interface	Ethernet
Data storage	Internal HDD
Communication interface	WLAN / Ethernet
Battery life time Changeable battery pack	typically 1,0 h

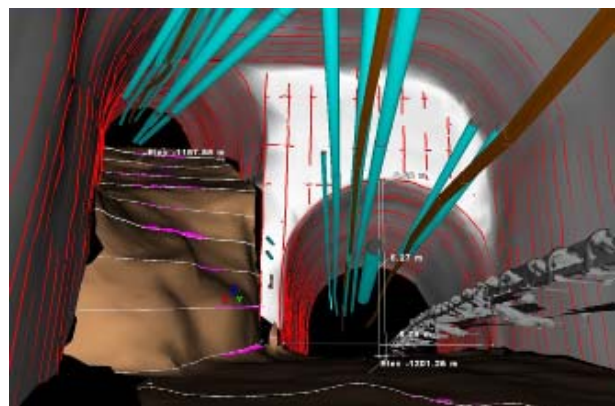
Dimensions and weights	
Scanner (WxDxH) / weight	250 mm x 414 mm x 395 mm / 30,6 kg
Bottom of scanner to horizontal axis	343 mm
Tripod Height	Approx. 800 mm – 1.300 mm /
Weight Diameter	12 kg Approx. 285 mm

Specification may change without notice.

¹⁾ If the distance to an object exceeds the ambiguity interval, the measured distance starts again at zero meters. The values of measured distances are periodic with the ambiguity interval.

²⁾ Due to technical reasons, the distance measurement is calibrated until 0,4 m. For distances closer than 0,4 m there might occur failures in the distance measurement.

³⁾ Datarate: 127.000 pxl/sec, raw data, in high power mode



As-built documentation of underground roadway

DMT GmbH & Co. KG
Exploration & Geosurvey

Am Technologiepark 1
45307 Essen, Germany

Phone +49 201 172-1970
Fax +49 201 172-1971
info.imager5006ex@dmr.de
www.dmr.de

Member of TÜV NORD Group

