DMT

Engineering Performance

Laser Scanner IMAGER 5006EX



The Safe Way of Measuring in Explosive Atmospheres

The IMAGER 5006EX1 revolutionizes 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)



Deformation monitoring of a power plant flue



IMAGER 5006EX



Point cloud of a pumping station in an undergroundcoal mine

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Techni	a a lífi a s	

reclinical specifications				
Laser Measuring System				
Ambiguityinterval 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 Transce	iver			
Laser		Visible		
Laser safety class		3R (EN 60825-1)		
Deflection Unit				
Field of view vertical Field of view horizontal		310° 360°		
Resolution vertical Resolution horizontal		0,0018° 0,0018°		
Accuracy vertical Accuracy horizontal		±0,007°rms ±0,007°rms		
Max. scanning speed vertical Typ. scanning speed vertical		≤ 50 rps 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	12 kg		
Diameter	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



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DIN EN ISO **9001** DIN EN ISO **14001** DIN ISO **45001**

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