

工業用途向け 3Dレーザスキャナー VZ-200



High-Performance 3D Laser Scanner for Industrial Applications

RIEGL VZ-200

- high laser pulse repetition rate of up to 1.2 MHz
- high speed data acquisition with up to 550,000 measurements/sec.
- mounting and operation possible in any orientation
- high-accuracy, high precision ranging based on echo digitization, online waveform processing, and multiple-time-around processing
- excellent multiple target capability
- superior measurement capability in adverse visibility conditions
- orientation sensors fully integrated
- electrical interfaces for time synchronization of scan data

The High Speed High Performance 3D Laser Scanner RIEGL VZ-200 is a rugged and fully portable sensor especially designed for the rapid acquisition of high-quality three dimensional point cloud data even under high demanding environmental conditions in industrial environments.

Due to its ingenious design the scanner can be mounted and operated in any orientation and thus optimally adapted to the requirements of the operating environment. The RIEGL VZ-200 provides a unique and unrivalled combination of wide field-of-view, high accuracy, and extremely fast data acquisition.

High-performance pulsed laser ranging, based on RIEGL's state-of-the-art Waveform-LiDAR technology – offering echo signal digitization with subsequent online waveform analysis – results in accurate measurement capabilities with excellent multiple target echo discrimination.

As the scanner operates at extremely high laser pulse repetition rates, laser ranging by pulsed time-of-flight ranging normally will become ambiguous. By means of applying the RIEGL library RMTA data provided by the VZ-200 are reliably assigned to the correct MTA zone and thus range values are given correctly. The RMTA library is available for all major platforms and makes use of any GPU available to further speed up processing.

Scanner control and acquisition of the binary RIEGL raw RXP-data-stream is supported by the RVLUB software library.

Typical applications include

- Process Automation of Stackers and Reclaimers
- Measurement of Stock Piles and Bulk Material
- Topography and Mining

visit our website
www.riegl.com



RIEGL
LASER MEASUREMENT SYSTEMS

VZ-200 工業用途向け 3Dレーザースキャナー

- 工業用途向け 高性能3Dレーザースキャナ
 - 有効測定最大 550,000 測定/秒
 - 測定範囲 1-750m
※対象物の反射率、測定レートによる
- 厳しい環境下において、特に高品質な3D点群データを 高速に収集するために設計されています
- 標準的な用途
 - スタッカー&リクレイマーの自動処理
 - ストックパイル、バルクの測定
 - 地形計測



VZ-200 工業用途向け 3Dレーザースキャナー

測定視野角（FOV）：110°

あらゆる角度で計測可能



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レーザーパルス繰返しレート (PPR)	100 kHz	300 kHz	600 kHz	900 kHz	1200 kHz
有効測定レート (点 / 秒)	45,800	137,600	275,000	412,500	550,000
最大測定距離 自然物ターゲット ≥ 80%	1000 m	750 m	540 m	450 m	390 m
最大測定距離 自然物ターゲット ≥ 20%	370 m	280 m	200 m	160 m	140 m
1パルスあたりの最大ターゲット数	15	15	8	5	4

測定原理	タイム・オブ・フライト
最短測定距離	1.5 m (100kHz時は2m)
精度	5 mm
レーザー波長	近赤外
ビーム広がり角	0.35 mrad
保護クラス	IP 64

レーザークラス	クラス 1
サイズ	188 mm x 348 mm
重量	約 9.4 kg
電源入力電圧/消費電力	18 - 34 V DC / typ. 55 W (max. 75 W)