



INTELLIGENT
TUNNEL
SYSTEM
SOLUTION



Vigor Technology

SSH0804W High-speed 3D Laser Scanner

Function description

- Universal architecture design for various engineering applications ;
- Construction machinery grade anti-seismic、 waterproof and dust-proof design , can be directly installed on the platform of construction vehicle to ensure the working ability in engineering environment ;
- Linear array scanning, high speed and high precision Scanning ;
- Dual-axis or single-axis measurement meets various practical applications ;
- Automatic scanning without human intervention ;
- Real-time data acquisition and processing capabilities to provide feasibility for real-time data applications ;
- Standard Ethernet communication interface ;
- Meet the needs of long-term measurement ;
- Optional self-positioning module, with the control point data to achieve the unification of spatial coordinates of the collected data ;
- Optional navigation and positioning module to realize vehicle automatic navigation measurement without assistance.

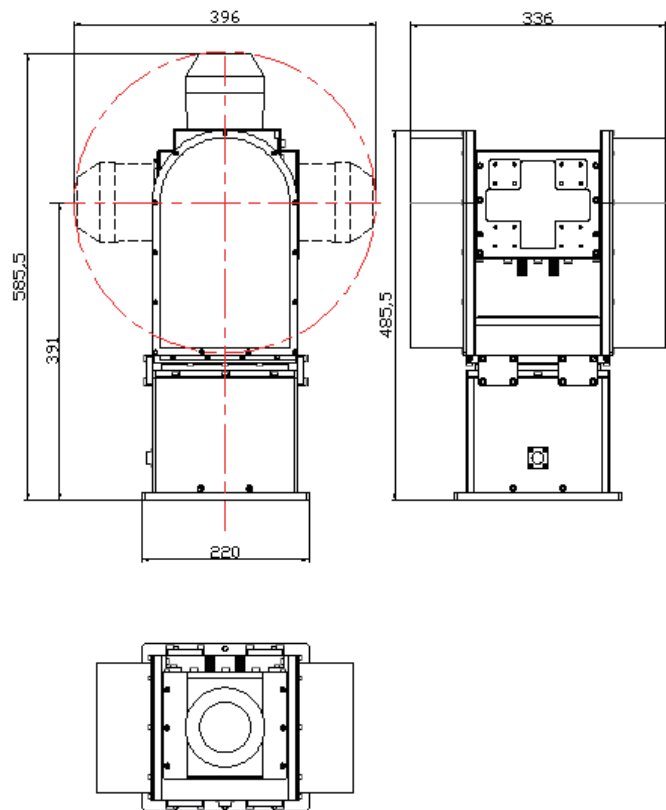


Product description

- Dual-axis structure, automatic continuous linear fast scanning, no dead angle in scanning range ;
- 16-bit encoder with servo control accuracy up to 0.01° , 12m typical distance sampling density $< 5\text{mm}$ in single-axis mode, as it is $< 1\text{mm}$ for dual-axis mode;
- Red light ranging, maximum distance 70m ;
- Horizontal installation, convenient and stable, with good seismic capacity ;
- No need for human intervention after measurement begins ;
- Optional handle operator ;
- Standard Ethernet communication protocol.

Typical applications

- Intelligent application of wet spraying machine
- Automation application of Mine
- Stockpile inventory at industrial and mining wharf



SSH0804W High-speed 3D Laser Scanner

	Parameter	Specific index
Equipment overall	3D scanning	Measuring distance : 2~70m; Infrared ranging : resolution 0.01mm, repeatability $\leq\pm 3$ mm Relative measurement error ± 2 mm ; Sampling frequency : ≥ 30 kHz ; Scanning mode : Vertical and Horizontal two-axis equidistant stepping ; Data interface : Ethernet ; Output data : 3D point cloud and surface model (Standard) Applied data analysis results (Optional)
	Positioning accuracy	self-positioning : Absolute accuracy 3cm ; Navigation : Relative accuracy 1cm
	Protection level	IP66
	Operation temperature	-20~65°C
	Power consumption	24VDC , max power 150W
	Shock	100g@0.5ms , three-axis (half-sine)
	Vibration	4grms , 20 ~ 2000Hz
	Dimensions	336*396*585.5 mm
	Protection	With anti-polarity power supply protection, over-current self-recovery protection, automatic lock-in protection after power failure
Biaxial characteristics	Horizontal axis rotation angle range	$\pm 180^\circ$
	Vertical axis rotation angle range	-135°~90°
	Horizontal axis rotation speed	$\geq 30^\circ/s$
	Vertical axis rotation speed	$\leq 30^\circ/s$
	Angular acceleration	$\geq 30^\circ/s^2$
	Absolute encoder	18-bit single-loop absolute value
Ranging laser	Laser wavelength	905nm , Infrared
	Laser class	class 1

Shanghai Vigor Technology Development Co., Ltd.

Shanghai Head Office | **Wuhan Branch Office** | **Changsha Branch Office**
021-58404921 | 027-86659860 | 0731-85653080

www.vigordigital.com