SPECIFICATION

Device type	SPL-1500	SPL-620	SPL-370	SPL-180
Type	pulsed precise scan technology			
Color	Grey	Grey	Grey	White
Scanning Range[1]	0.6 ~ 1500 m	0.6 ~ 620m	0.6~370m	0.6~180m
Scanning Accuracy[2]	3 mm @ 100 m	5 mm @ 100 m	5 mm @ 100 m	5 mm @ 100 m
Scan Rate	2,000,000 pts/sec	1,200,000 pts/sec	500,000 pts/sec	500,000 pts/sec
Angular Accuracy	0.001°（H./V.）			
Scanning FOV	360° (H.) & 300° (V.)			
Laser Class	Class1 eye-safe (in accordance with IEC 60825-1:2014)			
Laser Wavelength	1550 nm, invisible			
Laser Beam Divergence	0.3 mrad (1/e)			
Interface	USB 3.0, external power supply, Ethernet			
Data Storage	USB 3.0 flash drive 256 GB (as default)			
Imaging Resolution	inbuilt（24.6 MP in total, 2 x 12.3 MP）			
Scanning Control	on-board 5-inch HDR (720x1280) color touch display or web interface remote control on tablet/smartphone			
Dual-axis Compensator	compensating range±15°; compensating accuracy 0.008°	compensating range±10°	compensating range±10°	N/A
Sensor	integrated, height relative (to a fixed point) to detect	altimeter	N/A	N/A
	on board	on board	on board	on board
	integrated, orientation to detect	compass	N/A	N/A
	integrated tracking GPS(L1)&Beidou(B1)	GNSS	N/A	N/A
Power Supply	rechargeable battery (as default); external supply by 19V DC			
Power Consumption	25 W (while scanning)			
Battery Endurance	max. 4 h per unit (one unit needed for operation only)			
Operating Temperature	-20°C ~ +60°C			
Storage Temperature	-35°C ~ +70°C			
Humidity Resistance	non-condensing			
Ingress Protection	IP64	IP54	IP54	IP54
Net Weight	6 kg (without battery); 6.45 kg (with battery)			
Dimension	247x107x202mm			

*1. The measured distance is the test conclusion of the laboratory under 80% reflectivity and is for reference only.
*2. The measured accuracy is the test conclusion of the laboratory under 80% reflectivity and is for reference only.

CONFIGURATION

No.	Item	Description	Quantity
		standard configuration	
❶	3D Laser Scanner Unit	model: SPL-500	1
❷	Lens Protective Cover		1
❸	USB Flash Drive	USB 3.1, 256 GB	1
❹	Rechargeable Battery	28.8 V, 3400 mAh, 97.92 Wh	2
❺	Battery Charger		1
❻	Charger Adapter		1
❼	Carrying Case		1
❽	Lightweight Tripod	packed with a soft bag	1
❾	Software Dongle Key	for post-processing AcuteLas Studio	1
		optional accessories	
❿	scanner sphere	6 nos. as one set, packed in a separate case ready to place in front and behind both	6
⓫	Backpack		1
⓬	RTK Connector		1

SANDING OPTIC ELECTRICS INSTRUMENT CO.,LTD
Add: Geo-information Industrial Park, No.39 Si Cheng Rd, Guangzhou, China
Tel: +86-20-23380888 Fax: +86-20-23380800
E-mail: denzel@sandinginstrument.com
http://www.sandinginstrument.com

SANDING

AcuteLas Series

SPL-1500/SPL-620/SPL-370/SPL-180

Pulse. Portable. Accurate. Efficient

(V. 202409)

FEATURES

inbuilt GNSS module
GPS L1 + Beidou B1 tracking

scan FOV
horizontal 360°, vertical 300°

amazing point rate
up to 2,000,000 pts/sec

long measuring range
up to 1500 m

angular accuracy
horizontal 0.001°, vertical 0.001°

inbuilt camera
2 lens, 24.6 MP in total

multi-target detection
higher point density, suited to complex scenes

automatic leveling
easy and efficient setup

dual-axis compensator
range ±15°; accuracy ±0.008°

data storage
USB flash drive 256 GB

Wi-Fi access
tablet, smartphone or laptop

data communication
flash drive & USB 3.0 interfaces

battery endurance
4 hours, hand-carry by airplane

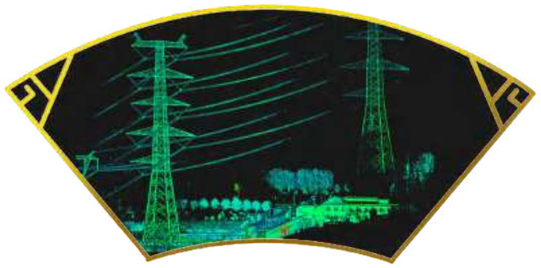
compact and lightweight
6kg only, goes with portable tripod

APPLICATIONS

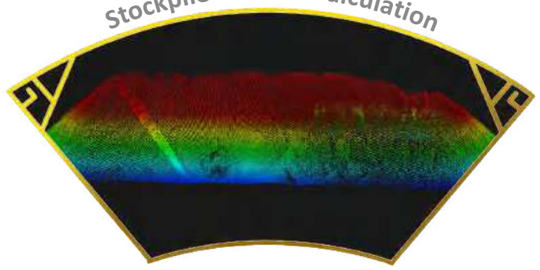
Archeology

Building Elevational Surveying

Utilities

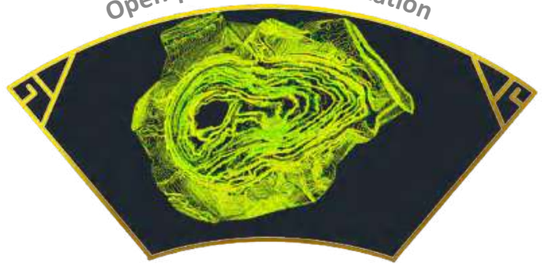


Stockpile Volume Calculation



BIM Modeling

Open-pit Mining Digitization



SOFTWARE

SYSTEM REQUIREMENTS

Operating System	Windows 10 IoT Enterprise or higher
Processor	Intel® 13th Gen Core™ i7 processor or better
RAM	32 GB or better
Storage	SSD 1 TB or better

- Data integration: Import&Export formats to support SOUTH and other formats (XYZ, E57, PCD, LAS, PLY, etc.)
- Automatic and manual registration, refinement, and reporting
- Geo-referencing: convert to local coordinate system by importing survey control files
- Automatic and manual classification
- Data interaction (2D, 3D and setup view)
- 3D calculation (distance, area, and volume)