

SPECIFICATION

<b>GENERAL</b>		<b>PHYSICAL</b>	
Model	• SPL-1500/SPL-620/SPL-370/SPL-180	Dimension	• 247x107x202 mm
Series	• AcuteLas	Weight	• 4.85 kg (without battery); 5.3 kg (with battery)
Type	• pulsed precise scan technology	Color	• purple grey, solid uncoated
<b>TECHNICAL</b>		LED Screen	• 5-inch HDR color touch display, 720x1280 dpi
Scan Range	• 0.6-1500m/0.6-620m/0.6-370m/0.6-180m	Tripod Mount	• lightweight elevating camera tripod, 3-section, quick release
Scan FOV	• 360° (H) x 300° (V)	Inverse Mounting	• yes, downward up to 0.505 m by elevating tripod
Scan Rate	• 2,000,000 pts/sec	<b>ELECTRICAL</b>	
Relative Accuracy*	• 1.2mm @10m; 2mm @25m	Power Supply	• detachable battery unit (inside battery compartment) or external power supply
Angular Accuracy	• 0.001° (H/V)	Power Consumption	• 40 W while scanning, typical
Scan Speed	• 80 Hz max.	Battery Unit	• rechargeable Li-ion battery, 28.8V, 3400mAh, 98Wh
Step Size	• 0.018° (20,480 pts 3D-pixel on 360° H./V.)	Battery Endurance	• approx. 4 to 4.5 hours per unit
Fieldwork Control	• onboard touch screen or tablet remote via WLAN	<b>ENVIRONMENTAL</b>	
Fieldwork Reference	• approx.16 sec (scan only, fastest); 41 sec (scan + image, fastest)	Working Temperature	• -20°C to +60°C
<b>ONBOARD SENSORS</b>		Storage Temperature	• -35°C to +70°C
Laser Scanner Sensor	• Class-1 eye-safe (in accordance with IEC 60825-1:2014)	Humidity Resistance	• non-condensing
Laser Wavelength	• 1550 nm, invisible	Ingress Protection	• IP64 rating
Laser Divergence Angle	• 0.5 mrad	<b>INTERFACING</b>	
Initial Beam Diameter	• 3.6 mm	USB	• 3.0, inside battery compartment
HDR Camera	• inbuilt 2 nos. forward side and upward 45°	WLAN	• 802.11 b/g/n on board
Imaging Resolution	• 24.6 MP (12.3 MP x2) in total for one capture	External Power Supply	• 18-24V DC, at bottom ring of the device
Color Resolution	• 8 directions, 45° each, 196.8 MP (12.3 MP x8x2) in total for one round	<b>DATA MANAGEMENT</b>	
Dual-axis Compensator	• compensating range ±15°	Storage	• USB 3.0 flash drive, 256 GB (upgradeable)
Height Sensor	• to calculate the relative heights by inbuilt barometer and record in scan files	<b>SOFTWARE</b>	
Temperature Sensor	• to record the internal temperature of device realtime and keep it working within the right range	Remote control	• AcuteLas Remote
Compass	• to record the northing direction while scanning	Pre-process	• AcuteLas Studio
GNSS	• integrated GPS (L1) & Beidou (B1)	SDK Option	• negotiable, based on project demand

Note\*: the accuracy performance here came from the good conditions based on factory standards while the actual performance might vary due to different environments (lighting, textures), reflectivity, weather (temperature, humidity), etc. And all specifications are subject to change without any prior notice.

CONFIGURATION

No.	Item	Description	Quantity
standard configuration			
①	3D Laser Scanner Unit	model: SPL-500	1
②	Lens Protective Cover		1
③	USB Flash Drive	USB 3.1, 256 GB	1
④	Rechargeable Battery	28.8 V, 3400 mAh, 97.92 Wh	2
⑤	Battery Charger		1
⑥	Charger Adapter		1
⑦	Carrying Case		1
⑧	Lightweight Tripod	packed with a soft bag	1
⑨	Software Dongle Key	for post-processing AcuteLas Studio	1
optional accessories			
⑩	scanner sphere	6 nos. as one set, packed in a separate case ready to place in front and behind both	6
⑪	Backpack		1
⑫	RTK Connector		1

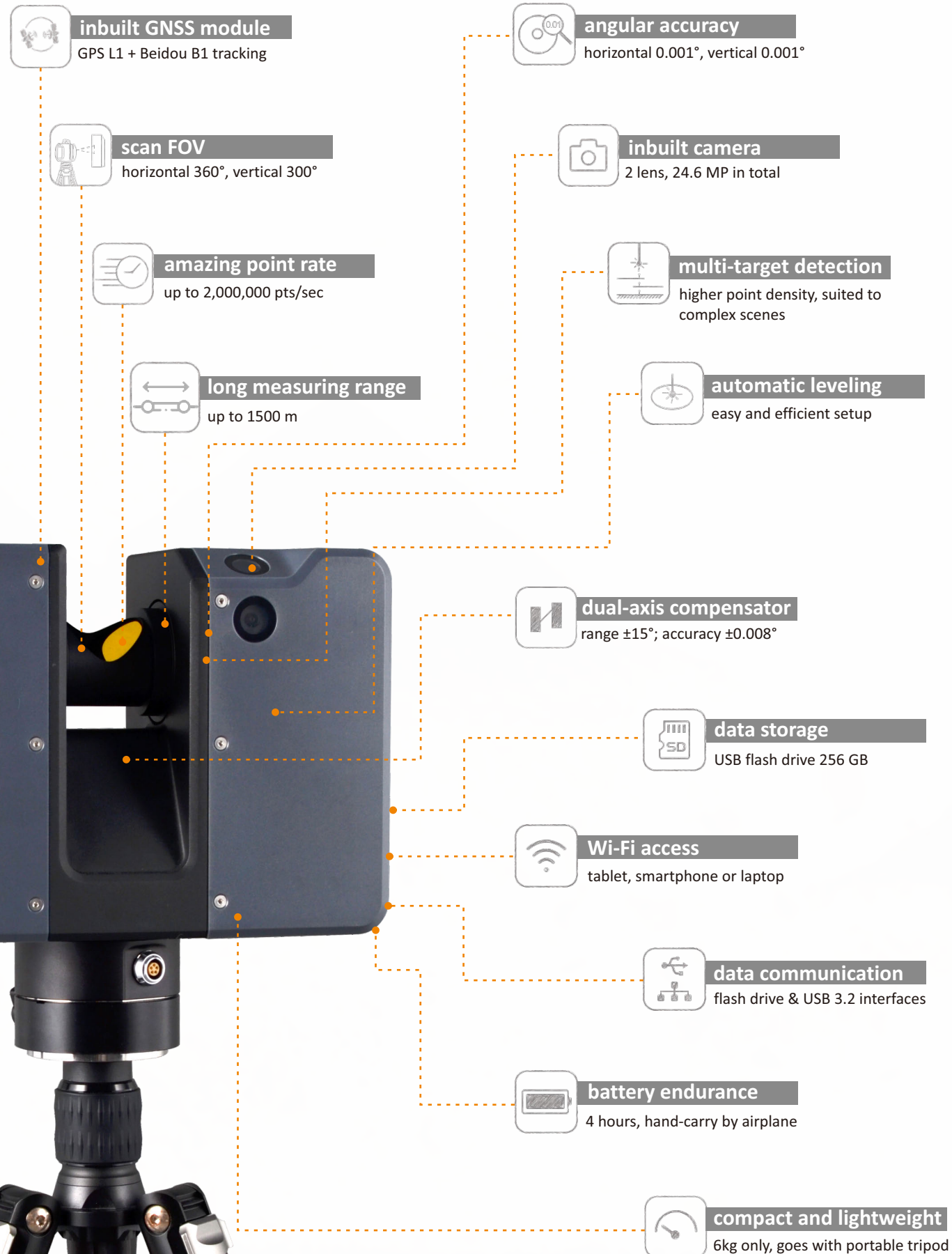


AcuteLas Series  
SPL-1500/SPL-620/SPL-370/SPL-180  
Pulse. Portable. Accurate. Efficient

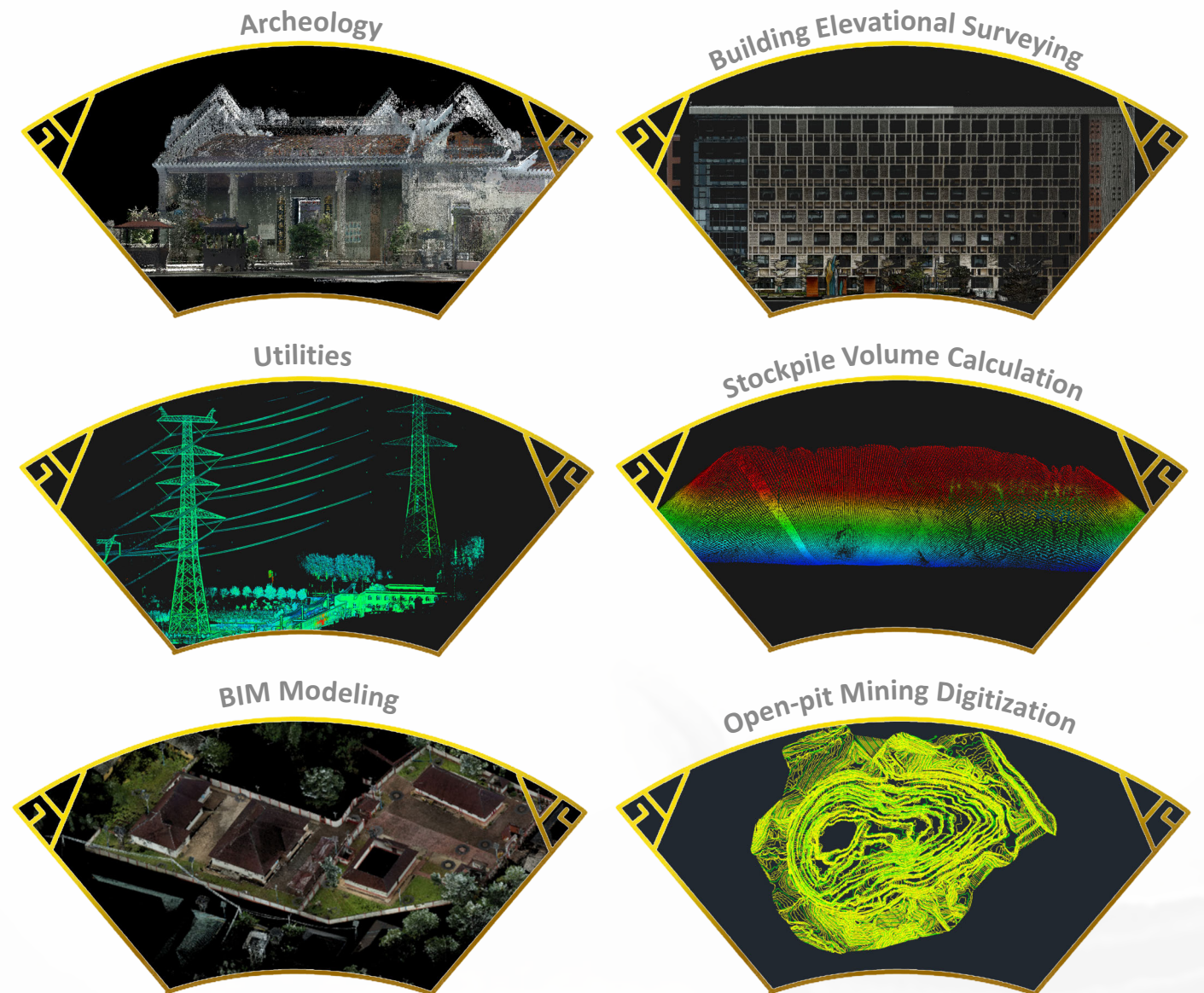




## FEATURES



## APPLICATIONS



## 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)