EngineeringLabChina

Product Name :	**Product Code :**
Laser Crack Measurement System	CHINAELABC4600005

Description :

Laser Crack Measurement System

Technical Specification :

Pavement cracks, pits and other diseases that cause road surface technical conditions or road surface performance degradation are generally called as road surface damage. The severity of road damage seriously affects the speed of the vehicle and road.

This laser crack measurement system is 2D version, which adopts line-scan camera and the infrared laser to continuously collect the data of the asphalt pavement and cement concrete pavement. Based on the collected images of the pavement to identify the asphalt pavement disease (11 types of disease such as crack, block crack, etc.)

The laser system adopts the high resolution line-scan camera to seamlessly scan the lanes at longitudinal 1mm distance, each 2048mm forms a road image. Infrared laser-assisted illumination is used to achieve normal detection of road in all weather conditions and special environments (such as tunnels, culverts, cloudy days, nights, etc.) to obtain real road images.

Features
Full lane coverage, complete data collecting
The laser system adopts the special structure design of single camera/laser. The designed road surface detection width can reach 3.5m or above, realizing the collection of full-width road surface data.
Available exposure and gain adjustment selection
The system supports camera exposure and gain adjustment. During the detecting process, a suitable solution can be quickly selected to improve the efficiency of manual adjustment.
High image quality
The system adopts a lens filter, which eliminates the influence of natural light and vehicle body shadow on image

quality, which provides high image quality.
 Camera
Resolution: 2048 x 1
Sampling frequency: 36kHz
Laser device
Power: 7W
Crack system
Detecting speed: 0~100km/hour
Continuous working time: More than 8 hours
Transverse effective detecting width: 3.75m
Longitudinal sampling interval: 1mm
Crack recognizing accuracy: ?1mm
Longitudinal and transverse length measuring error: ?5%
Damage area measuring repeatability: ?95%
Damage area relative error: ±5%
Image resolution: 2048 x 2048
Mounting box protection grade: IP65

Engineering Lab China