

**Contactless Measuring Method of Overhead Contact Line Positions
by Stereo Image Measurement and Laser Distance Measurement**

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We developed a contactless measuring method of static positions of the overhead contact line from vehicles by stereo image measurement and laser distance measurement, and conducted measurement experiments. By using the combination of two types of sensors, this method can made high detection performance and high measurement accuracy compatible. Moreover, since it is completely contactless, the measurement of the messenger wire and the auxiliary messenger wire is also possible. By using this method, the automation of the measurement and the quantification of the condition diagnosis of long contact line equipment are attained, and the increase in the efficiency of the maintenance can be expected.