

AUTOFOCUS MOBILE PHONE CAMERAS

Background

Auto-focus mobile phone camera manufacturers have used expensive confocal microscopes to check the motion of the lens holder on the production line. Those microscope measurements have been problematic and a better solution has been sought by one manufacturer.

The model D21 sensor with its small size and favorable operating range was proposed to solve the problem:

- three Philtec probes could be implemented to measure Z axis motion as well as tilt about X and Y.

Demonstration

With a target disc placed on the lens holder assembly, the Philtec sensors were successfully implemented for checking the motion of the lens holder. The customer found:

- The sensors to be very repeatable
- Three Philtec sensors combined are about 1/10 the cost of one confocal microscope
- The Philtec sensors provided more information than the microscopes

