

ABSTRACT

An optical module includes: a light source configured to emit diffusion light to tracks; one light receiving array and another light receiving array which are arranged across the light source in a width direction substantially vertical to the measurement direction; a light receiving array arranged between the one light receiving array and the light source, and configured to receive light which is reflected at the tracks having a first incremental pattern; and a light receiving array arranged between the another first light receiving array and the light source, and configured to receive light which is reflected at the tracks having a second incremental pattern which pitch is longer than a pitch of the first incremental pattern.

Fig. 5