LUMETRICS
Precision Measurement Solutions

Sales Document SD-103-01

OptiGauge® Probes- Overview and Specifications

Nominal working distance, acceptance angle, spot size, and working range are important characteristics of the optical probes, and are used in selecting the probe most suitable for customer's application. White papers are also available to provide more technical details on how these numbers are obtained.

Compatible with OptiGauge®	Part Number	NWD, mm	SS, µm	WR, ± mm	AA, ± ° degrees
OptiGauge® II & OptiGauge® LT	13000-93	**20**	10	1	8.5
	13000-92	**20**	20	5	3.5
	13000-91	**50**	40	8	2
	13000-94	**90**	80	8	1
OptiGauge® MLS	13000-76	**13**	10	1	8
	13000-58	**20**	10	1	8.5
	13000-20	**20**	20	5	3.5
	13000-10	**50**	40	8	2
	13000-75	**90**	80	8	1
OptiGauge® EMS	13000-72	**145**	35	15	2

SS: Spot Size defines the size of the measurement area on the sample, where thickness variations are averaged. At the nominal working distance, this measurement area is equal to the measurement beam size.

NWD: Nominal Working Distance is the distance between the tip of the probe and the focal plane, where the measurement beam has the smallest diameter. This plane is located in the center of the measurement window (i.e. of the working range). The sample must to be positioned within the measurement window in order for the OptiGauge to obtain measurements.

WR: Working Range defines the approximate range of distances between the sample and the optical probe, where the OptiGauge maintains its specified measurement precision. The values in the table are given for well-reflecting samples (such as glass and polished plastic placed in the air). The values for less reflective interfaces (e.g. plastic in liquid) may be smaller.

AA: Acceptance Angle defines the approximate tolerance of the probe to angular misalignment of the probe, where the OptiGauge maintains its specified measurement precision. The values in the table are given for well-reflecting samples (such as glass and polished plastic placed in the air). The values for less reflective interfaces (e.g. plastic in liquid) may be smaller.