

SLM IM

Industrial Distance Metrology System

Product Features

1 kHz measurement rate

<2 ms measurement latency

0-2 m range window

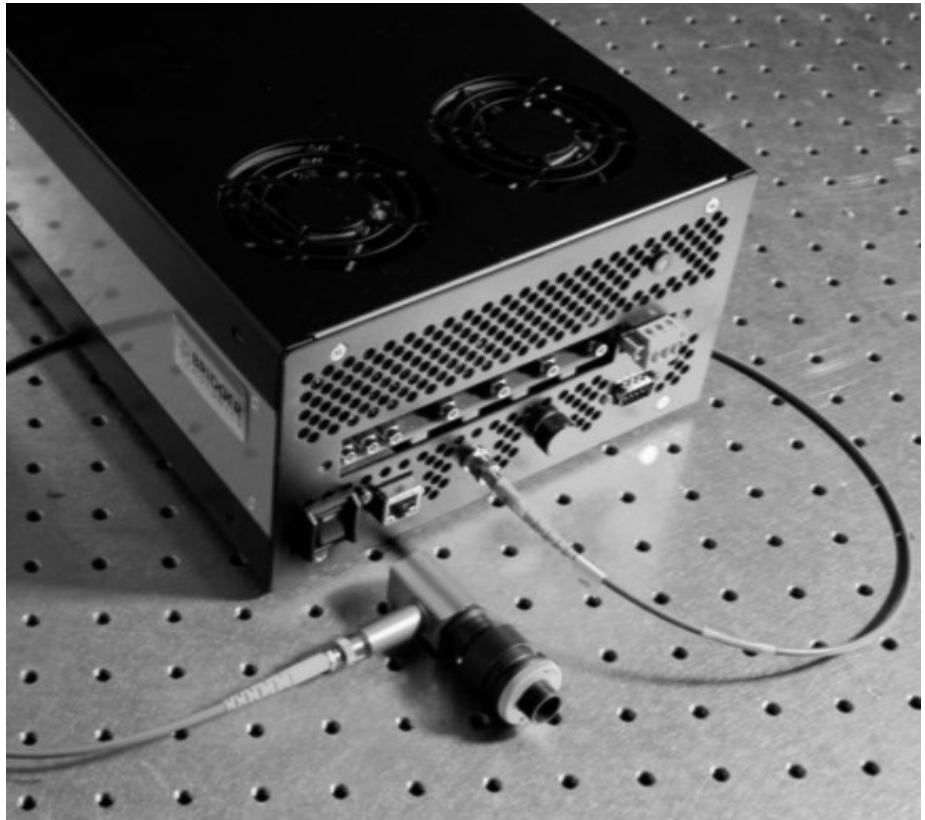
<10 μm accuracy

Fiber optic beam delivery with compact probe

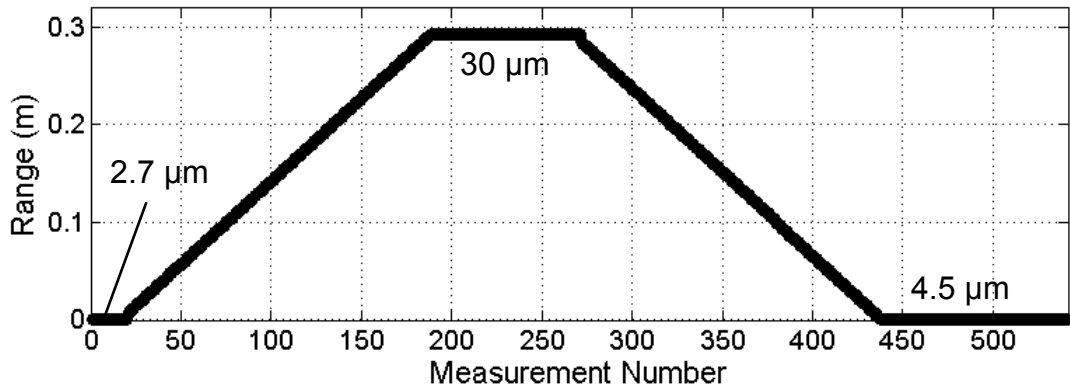
GUI/API measurement control and interface

Ethernet communication

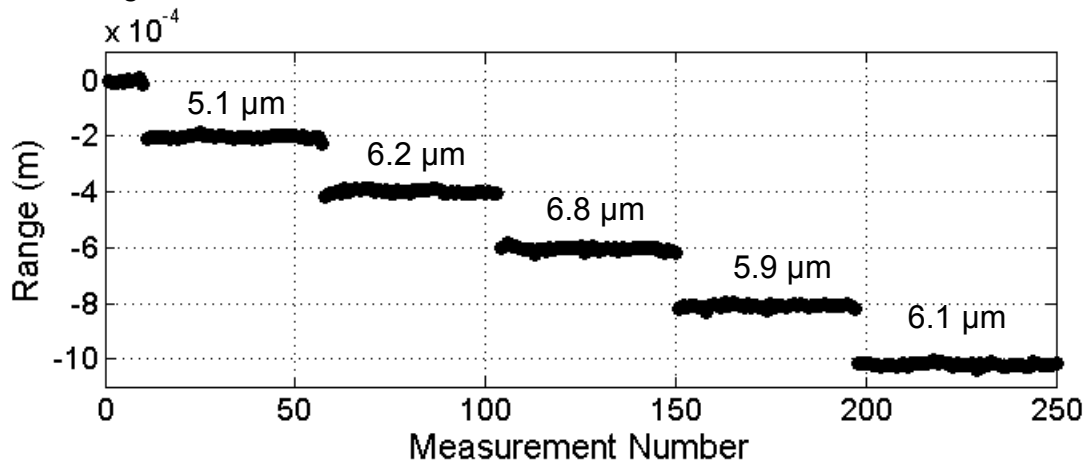
The SLM-IM industrial metrology system provides rapid and accurate distance measurements for precision manufacturing and material processing applications. It features a compact and rugged form factor, a powerful and user-friendly software interface, and convenient fiber delivery of the measurement beam via a compact optical probe. The flexible beam delivery, low measurement latency, and user-configurable API interface facilitate OEM integration into laser material processing and multi-axis traditional machining platforms for enhanced manufacturing capabilities including: in-situ dimensional verification and quality control measurements, 3D mapping of the part as it is fabricated, and real-time feedback for improved control of the manufacturing process.



Axial motion testing – A brushed aluminum part is moved along the beam axis away from, and toward the probe at 100 mm/s.



Lateral motion testing -120 mm/s velocity on a machined aluminum part with 200 μm steps at a range of 1.5 m.



3D mapping – High accuracy mapping is achieved by scanning the measurement beam over a part under test.

