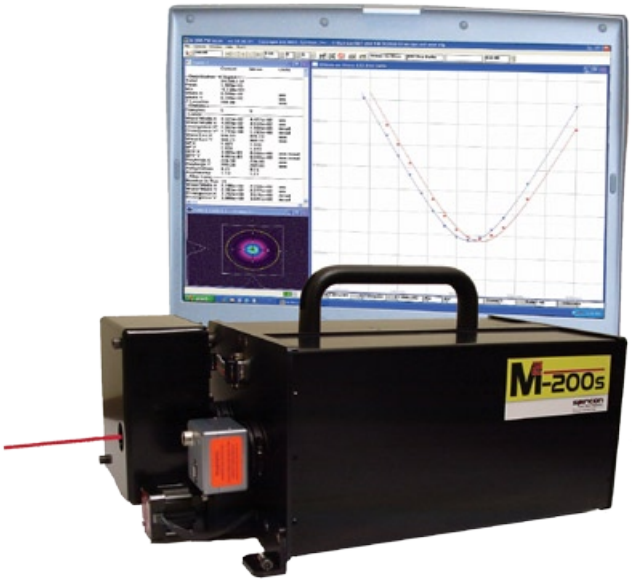
3.6.1 Camera Based Beam Propagation Analyzer: M^2

M^2-200s

- Automatically measure your beam quality in under 2 minutes
- Tune your laser for best operation
- ISO compliant
- Specifically developed for continuous usage
- Unequaled accuracy using patented Ultracal™
- Calibration
- Automatic attenuation adjustment
- Pulsed and CW for most beam diameters and powers
- Compact and portable



Not all commercial M^2 measuring instruments conform to the ISO 11146 method of employing a fixed position lens and moving detector. Instead, some manufacturers use a fixed position detector and a moving lens. If the laser beam is diverging or converging within the travel range of a moving lens, the reported M^2 value and other results can be significantly compromised. Spiricon's M^2-200s and M^2-200 Beam Propagation Analyzers are fully ISO 11146 compliant.

Automatic M^2 - at Production Speeds

The M^2-200s optical train uses a fixed position lens and camera. The mirrors that direct the focused beam into the camera are moved to precise locations, translating the beam through both the waist region and the far field regions. All these measurements and translations, as well as incremental beam attenuation, are automatically controlled by the M^2-200s software. Software improvements in the M^2-200s, including more efficient algorithm execution, has decreased the measurement reporting time by 2-3 times, making it possible to report M^2 in under two minutes.