

# CCD LASER METERS

## ST303 OptiGAGE

The ST303 Series is a family of precision CCD style laser displacement meters. They provide the most precise measurements for all metal applications including: displacement, distance, position, thickness, dimension and vibration. The system measures distances without contact against a wide variety of material surfaces. These laser units may be used with the ST300 MTS system to continuously measure turret-bearing wear and other process variables. Additional measurement range sensors available – please inquire.

### KEY FEATURES

- ◆ High speed CCD-technique
- ◆ High resolution static 0.01% FSO
- ◆ High sampling rate of 1 kHz
- ◆ Integrated electronics
- ◆ Output 4 to 20mA
- ◆ Compact design
- ◆ Rugged mill-duty enclosure with air purge

ST303 OptiGAGE



Sensor inside enclosure



Complete assembly of sensor enclosure and mounting plate

ST205 Protective Enclosures



**Dimensions**  
Sensor Enclosure:  
4.5"L x 1.25"W x 3.5"H



**Dimensions**  
Mounting plate:  
6.5"L x 0.5"W x 4.0"H

### SPECIFICATIONS

MODEL	/10	/20	/50	/100	/200
Measuring range (mm)	10	20	50	100	200
Midrange (mm)	25	40	70	100	160
Linearity (µm)	20	20	20	20	20
Resolution - static (µm)	1	2	5	20	40
Sampling rate	1 kHz				±0.4%
Light source	Semiconductor laser 1mW, 670 nm (red)				
Laser safety class	Class 2, DIN EN 60825-1 03.97 / IEC 825-1 11.93 / FDA				
Vibration	15g / 1-Hz ... 1kHz				
Temperature stability	0.03% FSO/K		0.08% FSO/K		
Operating temperature (°C)	0 to 55				
Output (mA)	4 to 20				
Supply voltage (VDC)	11 to 30 VDC, typ. 24 VDC / 150mA				
Electronics	Integral signal processor				

### BENEFITS

- ◆ Non-contact measurement
- ◆ Fast adapting to varying surface properties
- ◆ Help diagnose maintenance issues
- ◆ Designed for industrial applications

