

Principles of Operation

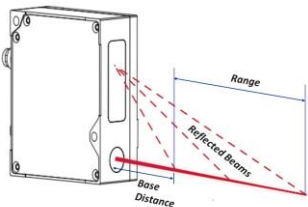
Range: Working distance between measurement endpoints over which the sensor will reliably measure displacement.

Base Distance: Offset distance from the face of the sensor to the beginning of the measurement range. Accuracy is greatest at the middle of the range, and the laser spot size is the smallest at the middle of the measurement range.

Resolution: Smallest change in distance that a sensor can detect. Stated as % of the full-scale range.

Linearity: The largest deviation from a best-fit straight line over the measurement range, created by data from the sensor with reference taken from a true distance scale. Stated as a +/- % of the range.

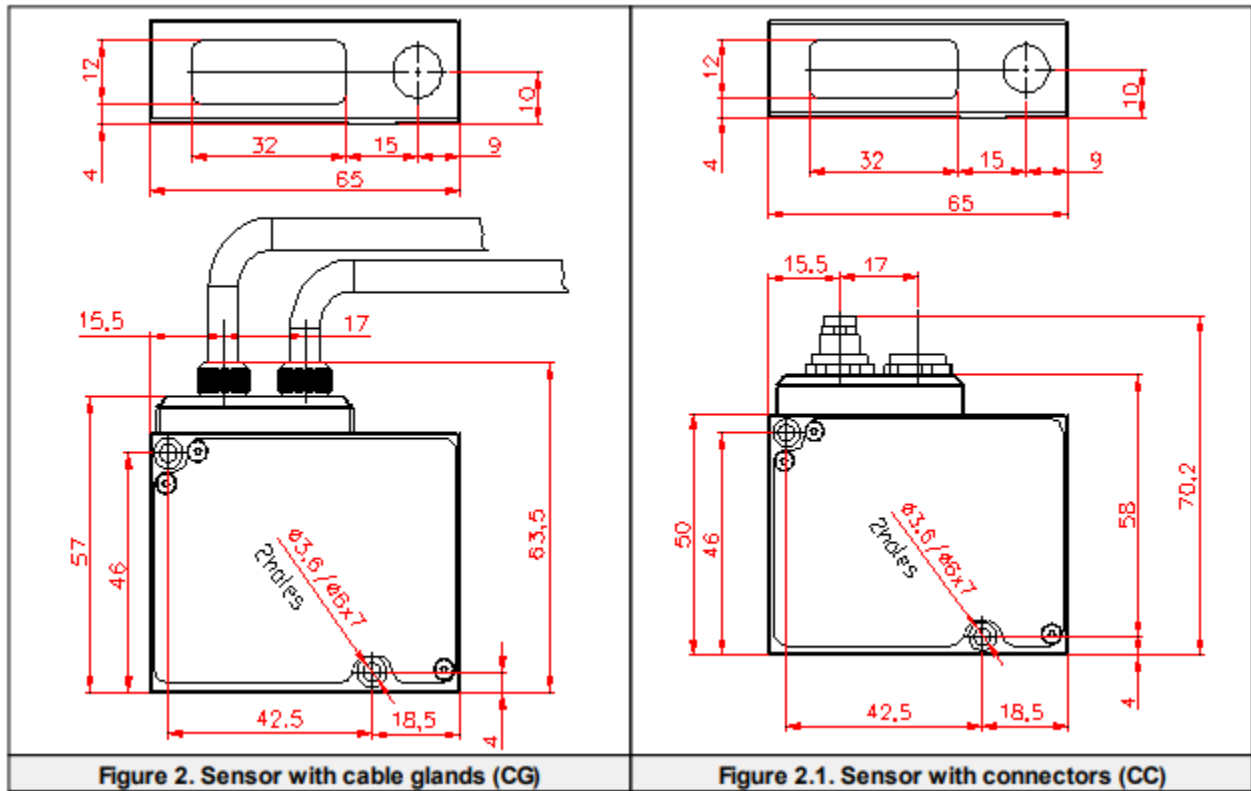
Sample Rate: Speed that data samples are obtained from the sensor. The maximum attainable sample rate is determined by the selected operating mode and target reflectance.



AR550 Standard Model Specifications units in Metric unless noted Imperial

[illegible]

Mechanical Dimensions units in mm.



AR550 Sensor Options

Blue diode lasers: Diode upgrades to visible blue for high sample rates on dark surfaces, shiny surfaces or in high ambient light.

Cables: Optional, longer cables. Contact us for custom cabling needs.

Serial Interface: Optional RS485 interface for long-distance connections. Replaces RS232