

Contactless Sheet Resistance/Resistivity Measurement

Model 1800CH-2.5" OEM - Ideally large samples, 450 mm wafer maximum

Characterization of

- * **All compound semiconductor materials**
 - epi, annealed ion-implants on semi insulating and some doped substrates
- * **Silicon wafers**
 - bulk Si, epi, annealed ion-implants, and POC13 doping uniformity on high resistivity substrates
- * **Thin film metallization**
 - Contact factory for details

Operating Characteristics

- * Precise voltage regulation for tight linearity and consistently repeatable results

Sample Handling and Sensing

- * Automatic drift compensation
- * Software-selectable resistivity ranges

Benefits

- * Lower operation cost
- * Perform non-destructive measurements
- * Minimal non-contact calibration
- * Measurement heads are permanent
- * Measurement range selected easily
- * No product wafer contamination
- * Ideal for mounted inline in production line

Measurement Capabilities

- * Normal coil gap (≥ 0.40 "/10 mm)
- * Wafer sizes: 4" (100 mm) to 18" (450 mm)
- * Manual loading

Sensor Transducer Size

- * 2.5" (63.5 mm) diameter for all ranges

Accessories and Options

- * Options that allow for turnkey standalone operations (R&D)

Nondestructive Measurement of Semiconductor Wafers

| Specifications | |
|----------------|----------------------|
| Range * | Sheet Res. (ohm/sq.) |
| Hi | 16 - 3000 |
| Lo | 0.16 - 16 |
| XLo | 0.035 - 1.6 |

*each range sold separately

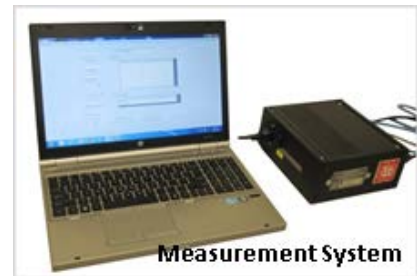


Figure 1: Model 1800CH-2.5"