The LR05 laboratory refractometer has been designed to be accurate, robust and easy to use. The project has been developed using state of the art technology, which guarantee a high level of precision and reliability, such as the sapphire prism, the LED long-life light source and high-resolution digital optical CCD sensor. The intuitive software interface is available on a wide 6.5 inches touchscreen panel PC which allows easy interface by means of USB ports (ethernet available).

The LR05 unit measures the sample refractive index calculating its concentration that may be displayed in different ranges: Brix, nD, % concentration. The LR05 may be delivered in 3 different models: standard, high and super accuracy. All the measurements are automatically temperature compensated: an optional flow cell is available for corrosive products. Main application fields are within industrial laboratories in the food, chemical, pharmaceutical and textile sectors.

Benefits
- Robust stainless steel case
- Accuracy based configuration
- Brix, nD and User scales
- Wide range of applications
- No maintenance

LR05
LABORATORY REFRACTOMETER
Brix, nD and % CONCENTRATION OF THE LIQUIDS
OPERATING SPECIFICATION

LR05 SA (Super Accuracy)
- Measurement limits: 1.3271 ... 1.5318 nD(0...95Bx)
- Accuracy: +/- 0.00002 nD (+/-0.018x)
- Measurement scale: nD, BRIX, HFCS42 and HFCS55 with adjustable Zero value and 10 “USER” scales totally configurable.
- Product temperature: 5...60 °C with automatic compensation of measured temperature
- Peltier Cell available.

LR05 HA (High Accuracy)
- Measurement limits: 1.3271 ... 1.5318 nD(0...95Bx)
- Accuracy: +/- 0.00005 nD (+/-0.03Bx)
- Measurement scale: nD, BRIX, HFCS42 and HFCS55 with adjustable Zero value and 10 “USER” scales totally configurable.
- Product temperature: 5...60 °C with automatic compensation of measured temperature
- Peltier Cell available.

LR05 ST (Standard Accuracy)
- Measurement limits: 1.3271 ... 1.5318 nD(0...95Bx)
- Accuracy: +/- 0.00007 nD (+/-0.05Bx)
- Measurement scale: nD, BRIX, HFCS42 and HFCS55 with adjustable Zero value and 1 “USER” scale totally configurable.
- Product temperature: 5...45 °C with automatic compensation of measured temperature

Note: for all different models, accuracy refers to measurement of certified standard sucrose solution up to 50 Brix at 20°C.

TECHNICAL FEATURES
- Quantity of analyzed sample: ~ 3 cc
- Measuring Time: Approx. 5 sec
- Power supply: AC 115/230V ±10% 50/60Hz
- Interface: Windows based touchscreen panel
- Outputs: Ethernet – 2xUSB
- Protection Category: IP65 according to EN60529
- Dimension: 262 (w) x 125 (h) x 261 (d)
- Weight: 5 kg