

LP10

BENEFITS, PAYBACK AND APPLICATIONS

- Optical technology
- Modular construction
- Very quick response time
- Operator independent analysis
- Easy sampler
- No maintenance for the optical sensors
- Annual calibration with traceable standards
- Compatible with Easy Diet DR10



EQUIPMENT CONFIGURATIONS

The LP series is a complete range of optical sensors studied for the soft drink and beer industry. The design is modular: the system is handled by a control panel to which you may add the desired module. It is possible to upgrade the initial configuration at a later stage with additional parameters. The analyzers can be used both as bench top application in the plant laboratory and as portable unit for direct measurement at line from piping or tanks. When installed in the laboratory, the system includes an automatic sampler able to handle any kind of different container.

Soft Drink

**SYRUP / INVERTED SYRUP
REGULAR / DIET BEVERAGES
JUICE / ENERGY DRINKS
FLAVORED WATERS**

Beer

**WORT COOKING
FERMENTATION
NO ALCOHOL / STANDARD BEER
BEER MIXTURES**

Wine

**GRAPES MATURATION
RECEIVING AREA
FERMENTATION
FINISHED WINE**

Parameters

DR20: Diet, Brix

MD01S: Brix, Fresh Brix,
Alcohol, Original Extract, Real Extracts

MD12: CO₂, Oxygen (option)

MODULES



DR20
*Differential
Refractometer*



MD01S
*Refractive Index /
Sound velocity*



MD12
*Pressure /
Temperature
(Alternatively MD05
Infrared)*

CONTROL PANELS

In the bench top application, LP10 is the combination of the MP05 control panel and your selected modules without limitation. The MP05 is a powerful touch screen panel PC with full communication capability including ethernet and USB. By means of the intuitive interface, Maselli software allows the operator to handle the whole measuring cycle including sampling, measurements and calibration.



MP05

When you are an existing user of Maselli DR10 Easy Diet, you may consider upgrading your equipment to a DR20 in order to be integrated within a new LP10 modular system.



DR10

The LP10 control panel may be connected to the Maselli laboratory software M8. This software has the capability to collect all the production data coming from any Maselli equipment installed in the plant either in line or in the laboratory. From one central location, it is possible to be aware in real time of what's happening in the process taking corrective actions when needed. It gives the opportunity to study all the recorded data with statistical analysis including cp and cpk of the process.



M8

SAMPLERS

SL01 Automatic Sampler for pressurized samples

The SL01 automatic sampler has the capability to pierce any kind of container including glass bottles, PET and cans. The construction is very robust with a smart design able to allow an easy operation: the cycle is fully automatic and pushing just one button, you get the measurement done. The operating costs of the system are very low: it is just recommended to perform one only preventive maintenance per year.



SL02 Sampler for non pressurized samples

The peristaltic pump based SL02 sampler is sampling the liquid from a beaker or a carousel. The pump has been selected for continuous operation: it does not require any specific maintenance. The operation of the device is controlled by the software of the Maselli analyzer connected for the measurement.

LP20 PORTABLE APPLICATIONS



In the portable applications, the LP20 series is using the same technology of the LP10 bench top equipment. The sensors are packed in IP67 case equipped with a local touch screen control panel, batteries, flow cell, tubing and all the accessories needed for the measurement at line. Both in the CO₂/O₂ configuration and in the alcohol one, the LP20 is light but very robust and easy to operate for quick connection to a tank or a piping.

LP10

WITH SLO1 AUTOMATIC SAMPLER

Application - Sampling from a container



LP10

WITH SLO2 PERISTALTIC PUMP

Application - Sampling from a beaker or carousel



OPERATING SPECIFICATIONS

Concentration Measurement

Brix

Measurement range: 0...95 Brix
Accuracy: +/- 0.02 Brix

Diet

Measurement range: 0...20 Brix
Accuracy: +/- 0.003 Brix

Alcohol

Measurement range: 0...16.5% v/v (0...13%w/w)
Repeatability: +/- 0.02 v/v

Real Extracts

Measurement range: 0...30 Ew
Repeatability: +/- 0.02 Ew

Original Extracts

Measurement range: 0...30° Plato
Repeatability: +/- 0.02° Plato

CO₂ Measurement

Measurement range: 1...5 v/v (2...10 g/l)
Reproducibility: +/- 0.025 v/v (+/-0.05 g/l)

Oxygen Measurement

Low Range

Measurement range: 0...2000 ppb
Reproducibility: +/- 1 ppb

High Range

Measurement range: 0...22.5 ppm
Reproducibility: +/- 0.05 ppm

TECHNICAL FEATURES

Product Temperature: -5°...+35°C (23°...95°F)
Degree of protection: IP65 to EN60529
Power Supply: AC 100V...240V, 1.5A, 50...60Hz
DC 24V, 50W

Digital Interface: USB, Ethernet/IP
Measuring time including sampling: Approx. 60s

Please refer to the technical datasheet for further data.

More products for
the Beer and
Soft Drink Industries

UR24

Process Refractometer



In line - Brix / Plato

BA06

Beer Analyzer



In line - Alcohol, Plato, Extract, CO₂

IB08

Soft drink Analyzer



In Line - Bx/Diet/CO₂



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LP10

LABORATORY AND AT LINE ANALYZER

SOFT DRINK - DIET, BRIX, FRESH BRIX, CO₂ AND OXYGEN
BEER - ALCOHOL, EXTRACT, PLATO, CO₂ AND OXYGEN