# **LS20**

# BATCH LIQUID SAMPLING



HE LS20 Liquid Sampler has an integrated syringe sampler and optical particle counting system. It's easy-to-use Windows<sup>tm</sup> based software interface is designed to meet the European Pharmacopeia (EP) and Japanese Pharmacopeia (JP) as well as US Pharmacopeia USP 788 international regulatory requirements.

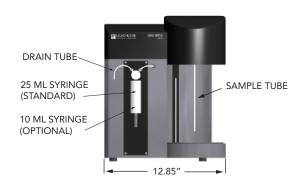
The LS20 uses a high accuracy syringe pump flow control system and a high sample volume sensor. With sample volumes adjustable from 1 to 1000 milli Liters (with 10ml and 25ml syringe options), it is a perfect tool for multiple batch sampling applications.

The graphical user interface makes the LS20 easy to configure and operate. Data automatically records up to 8 particle size channels from 1.0 to 50.0 microns and is available in real time graph and tabular form.

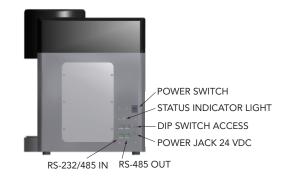
## FEATURES

- 1.0 µm to 50 µm size range
- Integrated "light obscuration" particle counter
- Software designed for 21 CFR Part 11 compliance
- International reglatory EP and JP recipes and reports
- Preconfigured USP 788 recipes and reports
- Sample volumes 1 to 1000 milliliters
- Precise syringe pump flow control
- Stainless steel enclosure
- Built-in magnetic stirrer
- Compact footprint
- 2 year warranty









# TECHNICAL DATASHEET

# LS20 Batch Liquid Sampling Particle Counter

Features	
Size Range	User defineable 1.0 - 50.0 µm
Calibrated Channel Sizes	1.0, 2.0, 3.0, 5.0, 10.0, 15.0, 25.0, 50.0 μm
Flow Rate	20 ml/minute
Laser Source	Laser diode
Calibration	NIST traceable
Syringe Sizes	10 ml, 25 ml
Maximum Sample	1 liter
Communication Mode	RS-485 MODBUS
Wetted Components	Teflon (PFA), Quartz, Kalrez, Kel F, Polypropylene
Stirrer	Magnetic with adjustable speed
Connectors	RJ-45
Supporting Software	LS Software
Enclosure	Stainless steel
Power	100-240 VAC, 24 VDC to LS20
Dimensions	12.875"(I) x 8.75"(w) x 14.75"(h) [32.7 x 22.2 x 37.5 cm]
Weight	20.5 lbs (9.3 kg)

#### **Environmental Conditions:**

Operating:  $50^{\circ}$ F to  $104^{\circ}$ F ( $10^{\circ}$ C to  $40^{\circ}$ C) / 20% to 95% non-condensing Storage:  $14^{\circ}$ F to  $122^{\circ}$ F ( $-10^{\circ}$ C to  $50^{\circ}$ C) / up to 98% non-condensing

## **Minimum System Requirement**

Windows 7<sup>TM</sup> or Windows 10<sup>TM</sup> compatible computer.

#### Included

LS20 instrument, USB to RJ45 cable, power supply, 500 ml beaker with edge guard, 10 feet of tubing, flow cell cleaning solution; nut and ferrule kit; 2x magnetic stir bars; Operators Manual and LS Software on USB key; Calibration Certificate and Carry Case with wheels.

## **Optional**

Printed operating manual; IQ/OQ Validation Documents, 10ml syringe; 5-piece beaker set (50, 100, 250, 600, 1000 ml beakers); certificate of origin.

### **Distributed By:**



Lighthouse Worldwide Solutions reserves the right to change specifications without notice.

