

EXCELLENCE IS

Total Process Control

with
Hamilton
Single-Use
Sensors

When it comes to process control in the biopharmaceutical industry, engineers around the globe rely on Hamilton's longtime expertise to deliver the highest quality process sensors. With our new breed of sensors specifically designed for single-use applications, you can now expect the same precise and hassle-free measurements in your single-use processes.



HAMILTON
THE MEASURE OF EXCELLENCE®

Designed Specifically to Meet Your Single-Use Requirements

Our single-use sensors combine the reliability and measurement stability of our long-term proven conventional sensors with the ease of use as an integral part of the bioreactor. The sensors retain the high accuracy performance even after gamma irradiation and a sufficient shelf life making it the ideal single-use solution.



READY TO USE

Pre-calibrated and sterilized integrated into the single-use container



WIDE RANGE CONNECTIVITY

Fully compatible with existing bioreactor controllers



SHORT WET-IN TIME

< 30 minutes



RELIABLE

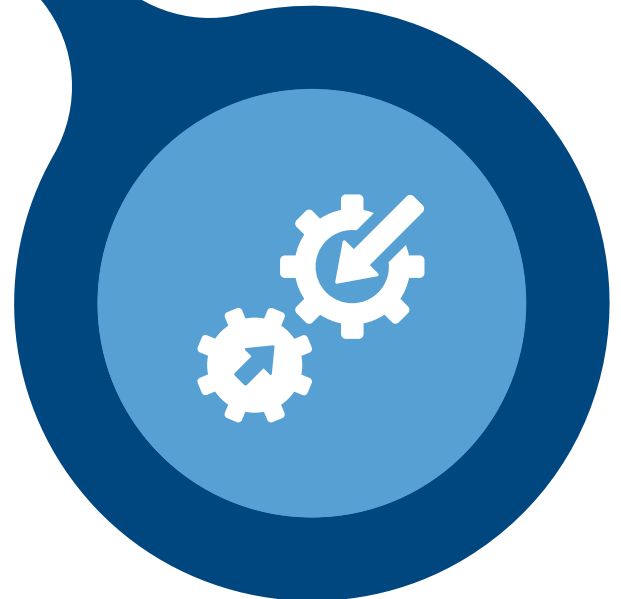
Proven Hamilton sensor technology



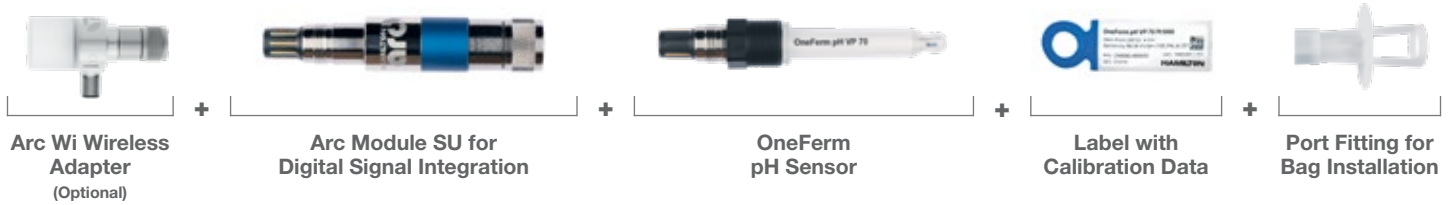
VERY LOW DRIFT

< 0.1 pH / week, unaffected by changing ionic strength

Hamilton provides all the components necessary for successful integration into your application

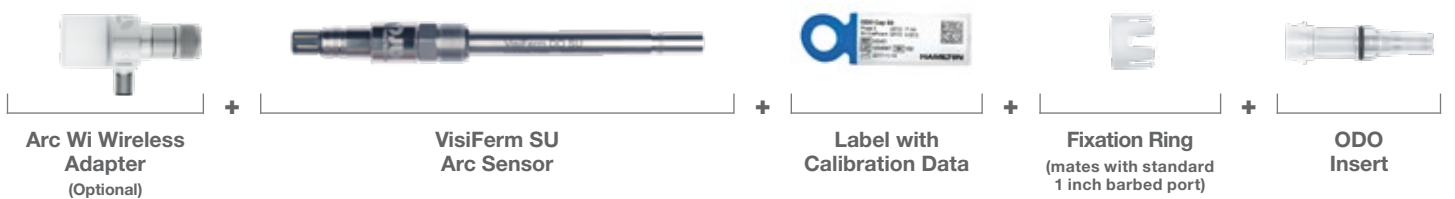
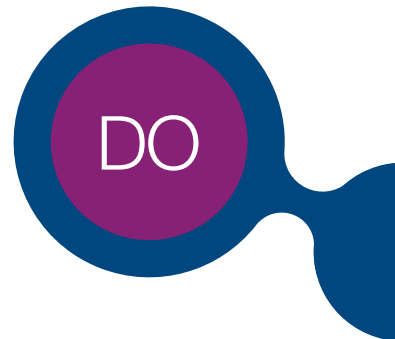


OneFerm pH



Criteria	Description
Gamma-sterilizable	Up to 45 kGy
Shaft length options	70 mm, 120 mm, 225 mm, 325 mm, 425 mm
pH measuring range	3 – 10
Cytotoxicity	Non-cytotoxic according to ISO 10993-5 and USP <87> after gamma sterilization
Shift	No shift of calibration values after gamma sterilization
Calibration	Calibration coefficients for manual input
Dry storage	Up to 18 months
Drift	< 0.1 pH /week

VisiFerm DO SU



Criteria	Description
Gamma-irradiatable	Up to 50 kGy
Response time t98%	< 30s at 25°C
Pressure range (bar g)	0 to 2 bar
Drift at room temperature	< 1% per week
Wetted parts	Cycloaliphatic polyamide (FDA approved, USP class VI), Silicone (FDA approved, USP class VI)
Wet-in time	< 30 minutes



Hamilton offers multiple options to integrate our single-use pH and DO sensors into your process:

Analog Solution

- Manually input calibration data from the sensor to your bioreactor
- Traditional mV output signal controller works with existing infrastructure

Intelligent Arc Solution

- Calibrate the sensor using your smart phone with Hamilton ArcAir Software — all data is stored within the Arc module
- Direct digital and 4 to 20mA connection to your control system
- Reduced startup and documentation costs

Contact our experts today to verify how our measuring solutions can leverage your single-use system.



©2018 Hamilton Company. All rights reserved.
All other trademarks are owned and/or registered by Hamilton Company in the U.S. and/or other countries.
Lit. No. 695245/00 — 06/2018

HAMILTON 

Web: www.hamiltoncompany.com
USA: 800-648-5950
Europe: +41-58-610-10-10

Hamilton Americas & Pacific Rim
Hamilton Company Inc.
4970 Energy Way
Reno, Nevada 89502 USA
Tel: +1-775-858-3000
Fax: +1-775-856-7259
sales@hamiltoncompany.com

Hamilton Europe, Asia & Africa
Hamilton Bonaduz A.G.
Via Crusch 8
CH-7402 Bonaduz, Switzerland
Tel: +41-58-610-10-10
Fax: +41-58-610-00-10
contact.pa.ch@hamilton.ch

To find a representative in your area, please visit hamiltoncompany.com/contacts.