Parts and Accessories

Ref	Description	Length
243235	OneFerm pH VP 70 NTC	70 mm
243236	OneFerm pH VP 120 NTC	120 mm
243237	OneFerm pH VP 225 NTC	225 mm
243238	OneFerm pH VP 325 NTC	325 mm
243460	Arc Wi 1G Adapter BT	
243490-01	Arc USB Power Cable VP8	
243499	Arc Wireless Converter BT	
243690	Arc View Mobile	
355263	Data Cable VP8	1 m
355264	Data Cable VP8	3 m
355265	Data Cable VP8	5 m
355266	Data Cable VP8	10 m
355267	Data Cable VP8	15 m
355268	Data Cable VP8	20 m

ArcAir Application

PC version: download from www.hamiltoncompany.com
Mobile version: download from App Store or Play Store

Download on the App Store

GET IT ON Google Play

Disposal

The design of Hamilton products optimally considers environmental compatibility. In accordance with the EC guideline 2002/96/EG Hamilton products that are worn out or no longer required must be sent to a dedicated collection point for electrical and electronic devices, alternatively, must be sent to Hamilton for disposal. Products must not be sent to an unsorted waste disposal point.

REF 627107/00 — 06/2017

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

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

This guide may be available in other languages.
Visit www.hamiltoncompany.com for more information.

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Arc Module SU pH

Quick Guide

The Arc Module SU* pH provides digital communication between OneFerm pH sensors and the ArcAir application (on mobile or PC) or a process control system (PCS).

The Arc Module SU pH is mounted between the VP head of an OneFerm pH sensor and the VP cable. The Arc Module converts the electrochemical signal from the OneFerm pH sensor to two 4–20 mA signals (pH & temperature) or a Modbus signal.

Single Use

HAMILTON

Technical Data Arc Module SU pH

Operation Voltage	7 to 30 VDC
Operating Temperature Range	5 to 50 °C
Protection Rating	IP 67

Detailed technical information can be found and downloaded on www.hamiltoncompany.com

VP 8 Pin Designation with Hamilton Data Cables VP8

VP pin	Function	Color Data Cable
A	4 - 20 mA interface #2	Yellow
B	4 - 20 mA interface #1	Green
C	Power supply: + 24 VDC (7 to 30 VDC)	Red
D	Power supply: Ground	Blue
G	RS485 (A)	Gray
H	RS485 (B)	Pink
Housing	Shield	Green/Yellow

⚠ ATTENTION! Always use Hamilton VP8 cables, available in a range of different lengths, for the easiest and safest connection of the Arc Module SU pH.

⚠ ATTENTION! Make sure that the housing of the Arc Module is connected to protective earth.

Typical Connection to PCS

Input Card is active (source) / galvanically not isolated

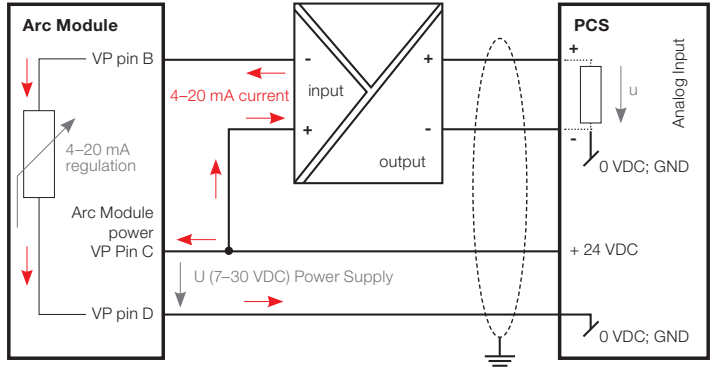

Figure 1: Typical connection to PCS using the Arc Module SU pH.

General Description

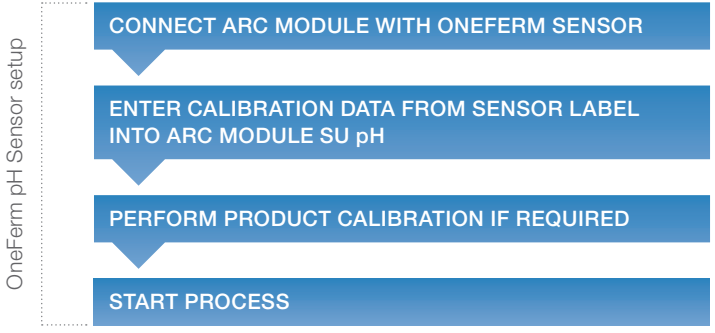

Figure 2: Sensor setup using a single use container with integrated OneFerm pH sensor.

Configuration

Three options are available for the configuration and monitoring of a sensor (see also Parts and Accessories for needed equipment and software):

- Personal computer or notebook
- ArcAir application on mobile devices
- Access via PCS (when integrated by the system supplier)

Calibration

The OneFerm pH sensor has been pre-calibrated at pH 4 and pH 7 at 25 °C; hence calibration prior to the process is not necessary. The calibration values for zero point and sensitivity (slope) can be found on the label attached to the sensor head.

1. Read the zero point (mV) and sensitivity (mV/pH) written on the sensor label (see figure 3).
2. Enter the zero point and sensitivity values into the Arc Module SU pH.
3. If required, perform a product calibration step to increase accuracy to ± 0.1 pH (valid within 2 pH units from the product calibration point and at measurement temperature).

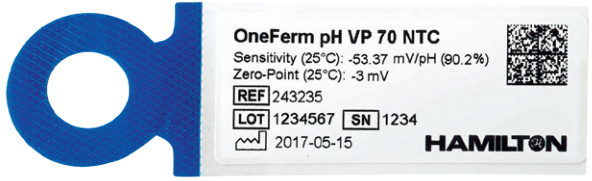

Figure 3: Example sensor label with calibration data.