

Liquistation

The sampler for all applications

Easy to use and simple to maintain

Liquistation



Sample Transport - The right technology for your application

Vacuum Pump

- Lower maintenance than peristaltic pumps with no tubing to wear out and replace
- Fast transport speeds with little impact due to head height
- Highest level of accuracy and repeatability of sample volumes
- Best performance in demanding applications with large particles
- Vacuum dosing chamber available in acrylic or glass
- Liquid detection with conductive or capacitance technology to suit the application
- Sampling mode is constant volume



CSF34/48

Peristaltic Pump

- Meet the EPA recommended line velocity with at least 2 ft/s (0.6 m/s) at head heights up to 26 ft (8m)
- Patented liquid detection
- Sampling modes
 - constant time - constant volume
 - constant time - variable volume
 - variable time - constant volume
- Good for toxic applications



CSF34/48

Closed Pipe


- Use for pressurized pipes or tanks up to 87 psi @ 122 °F (50 °C)
- Accurate sample volume for slurries with 10 ml, 30 ml or 50 ml sample volume
- Common process connections and a wide range of materials available
- Optional automatic cleaning available on the Samplefit CSA420 assembly


CSA420 Assembly



CSF48 only

Liquistation Features & Options

 <http://www.us.endress.com/CSF34>

 <http://www.us.endress.com/CSF48>



		CSF34	CSF48
Approval	Non-hazardous	standard	standard
	cCSAus General Purpose	N/A	optional
	NEMA 4x (controller only)	standard	optional
Sample Collection	Vacuum	optional	optional
	Peristaltic	optional	optional
	Closed-pipe	N/A	optional
Housing	Plastic PS	N/A	optional
	Plastic ASA-PC	standard	optional
	Stainless Steel-304x	N/A	optional
	Stainless Steel-316x	N/A	optional
Sample Cooling	None	N/A	optional
	Non-coated cooling system	N/A	optional
	Coated cooling system	standard	optional
Sample Distribution	Number of bottle configurations (glass, PE)	9	21
Power Supply	100-240 VAC, 50/60 Hz	standard	optional
	24 VDC	N/A	optional
Operating Language	English	standard	standard
	Additional languages	3	11
Sampler Stand	With or without flow-through sampling assembly	optional	optional
Additional Inputs	Up to 4 Memosens protocol industrial sensors	optional	optional
Additional Outputs and Communication	Up to 6, 0/4-20 mA outputs	optional	optional
	PROFIBUS DP (+Webserver configuration)	optional	optional
	Modbus RS485 (+Webserver configuration)	optional	optional
	Modbus TCP (+Webserver configuration)	optional	optional
	EtherNet/IP™ (+Webserver configuration)	optional	optional
	CDI service interface	standard	standard
Selected Accessories	Upper door window	optional	optional
	Door locks	optional	optional
	Inside temperature logging sensor	optional	optional
	Outside temperature logging sensor	optional	optional
	Battery backup	optional	optional
	1 GB Industrial flash drive and SD-card	optional	optional
	Commubox FX291+FieldCare® Software	optional	optional
	Field Data Manager Software	optional	optional

*N/A = not available

Communications and Data Handling

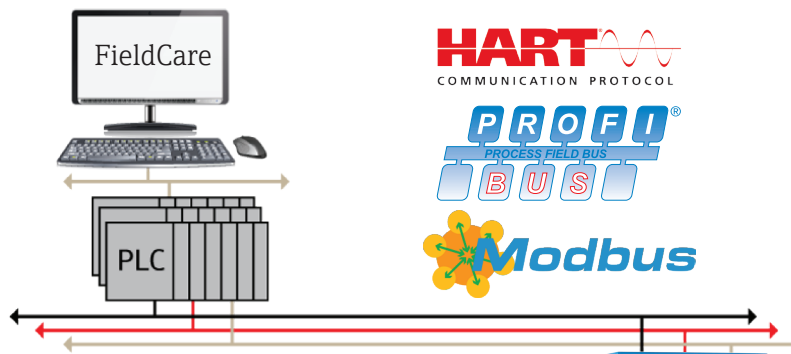
Data Transfer and Analysis Need more portability? The device configuration and logbooks can be saved and restored with the optional industrial SD card or FieldCare® via the CDI interface. For secure transfer, safe storage and a fast overview of all recorded data, FieldData® Manager software with its SQL database is available to use on your personal computer.



Field Data Manager Software

Digital Communication Because the Liquistation is built on the Endress+Hauser Liquiline platform, all relevant information is available for seamless integration into control systems with common digital bus communications combined with an Ethernet based configurator.

Do you need remote access? You can check the sampler status, obtain measurement values or change programs at any time via a standard WiFi/WLAN router using the on-board web server from the convenience of your computer.



 <http://www.us.endress.com/FieldCare>

 <http://www.us.endress.com/MS20>



Measuring station with event driven monitoring

Enhanced monitoring features allow program initiation based on an event - automatically.

Events can be activated using any Memosens® protocol industrial sensor in addition to standard flow or level measurements. Your samples are stored in either glass or plastic bottles with up to 21 possible size combinations to choose from. Because it is built on the Liquiline® platform, a standard feature of the Liquistation samplers includes a main program that can run up to 24 sub-programs at a time while it stores up to 100 sampling programs.

Memosens and Memosens Protocol Sensors:

- pH/ORP
- Conductivity
- Total suspended solids/ Turbidity
- Dissolved Oxygen
- SAC and Nitrate
- Ammonium/ Nitrate
- Free Chlorine

MEMOSENS



On-board Data Storage

The Liquistation memory stores up to 8 data logbooks that contain calibration, configuration, diagnostics and up to 150,000 measured values from the data logger including date/time stamps. This can be visualized on the HMI graphically or in tabular format along with all other sampling activities stored in the event logs.

- Menu guided, intuitive structure
- Large, easy to read 160 x 240 pixel, backlit liquid crystal display
- Easy touch selection with 4 soft keys and a navigator dial



Flow Proportional Sampling - get the complete package from Endress+Hauser

Sampling plus flow measurement- use the right technology for your application. For closed pipe flow measurements, add an electromagnetic meter such as the Promag W 400 for your wastewater requirements. Do you have an open channel application such as stormwater? Then the Prosonic FMU90 allows for a simultaneous measurement of level and flow with a single instrument. Connect the Promag or Prosonic directly to a Liquistation for a complete, flow-paced sampling solution.

 <http://www.us.endress.com/5W4B>

 <http://www.us.endress.com/FMU90>

USA

Endress+Hauser, Inc.
2350 Endress Place
Greenwood, IN 46143
Tel: 317-535-7138
888-ENDRESS
Fax: 317-535-8498
info@us.endress.com
www.us.endress.com

Canada

Endress+Hauser Canada
1075 Sutton Drive
Burlington, ON L7L 5Z8
Tel: 905-681-9292
800-668-3199
Fax: 905-681-9444
info@ca.endress.com
www.ca.endress.com

Mexico

Endress+Hauser México S.A. de C.V.
Fernando Montes de Oca 21 Edificio A Piso 3
Fracc. Industrial San Nicolás
54030. Tlalnepantla de Baz
Estado de México
Phone: +52 55 5321 2080
Fax: +52 55 5321 2099
eh.mexico@mx.endress.com
www.mx.endress.com

Other Locations

For other locations
visit: www.addresses.endress.com