

## C-Series CIP Units



Fully automated, stand alone, portable or stationary Clean in Place (CIP) unit with Sterilization (SIP) option. Modular platform and/or custom designed for drug manufacturers within life science, biopharm & vaccine industry segments.

CIP/SIP unit equipped with full recipe editor, tight process control, monitoring & reporting for applications, such as:

- Aseptic fill lines w/isolator technology
- Filter stations
- Formulation vessels
- Filling vessels & transfer lines
- Bio reactors
- Ultra filtration skids
- Freeze dryers
- Glove box isolators
- Other...



The C-Series CIP Units are compact skids that - due to our unique modular hardware and software platform - can be configured and adapted in many ways to best meet your specific performance, operational and installation requirements.

- Suited for cleaning of smaller to mid-sized process equipment;
- Full TACCT cleaning performance & flexibility;
- Designed for high end cGMP and FDA regulated facilities;
- Highly configurable, compact, cleaning & sterilization unit;
- S88 based software platform with our unique PLC driven recipe system;
- Full monitoring & reporting of critical process parameters;

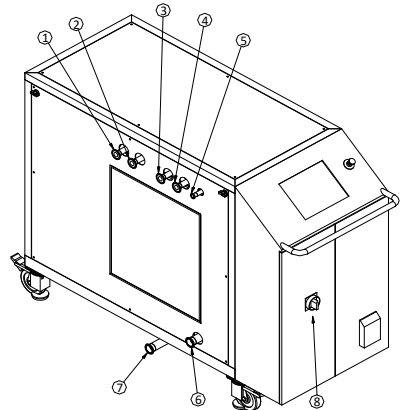
# C-Series CIP Units - Specifications

C-Series CIP/SIP Unit			
<b>Process &amp; Mechanical</b>	Buffer Vessel:	Single tank, 40 Gallons Vent atmospheric or sterile filter Fully welded insulation	
	CIP Supply:	CIP Supply Pump, < 120 psig @ 40 gpm Frequency controlled	
	Heating Options:	Steam heating      Electrical Heaters Plate type HX	
	CIP Return:	CIP Return Pump, < 40 gpm Divert valve arrangement for true re-circ and single pass to drain	
	Chemicals:	Automatic dosing of up to two (2) detergents Chemical concentration verified by high range conductivity	
	Instrumentation:	Level; CIP buffer vessel Pressure, flow and temperature; CIP supply High range conductivity; Chemical concentration Low range conductivity; Final rinse verification	
	Materials:	Product Contact:	AISI 316L, mech polish to RA 25 µin FDA approved
	Non product contact:	AISI 304	
<b>Controls</b>	Fully Automated:	Allen-Bradley Compact Logix PLC 10" touch screen HMI panel - running RS View GAMP5 Standard Software	
<b>Dimensions &amp; Weight</b>	Length:	62" / 160 cm	Height: 50" / 130 cm
	Width:	26" / 65 cm	Weight: 600 lbs / 270 kg
<b>Documentation</b>	Standard	QA Documentation	
	Documentation	Physical Specification	
	Package:	Hardware/Software Specification	

### Available Options:

- Pressure tested vessel (FV and 15 psi)
- Vent filter w/heat tracing
- Rupture disc w/burst indicator
- Electrical heating elements
- Heated gas purge w/0.2 micron filter
- Data Collection System (DCS)
- Process Builder Software
- Software integration (PCS/SCADA, etc.)

## C-Series CIP Units - Utilities & Connections



Baseline Utility & Process Connections		
1	USP purified water	min 10 GPM @ 20 psi
2	USP water for injection	min 10 GPM @ 20 psi
3	CIP supply 1	<40 GPM @ 120 psi
4	CIP supply 2	<40 GPM @ 120 psi
5	Compressed air	Nominal CFM @ 90 psi
6	CIP return	<40 GPM
7	Drain	<40 GPM
8	Power	3 x 480 N+PE, 60 Hz, 30/50 Amps
Optional Utility & Process Connections		
	Purge air	Clean steam
	Plant steam & condensate	Vacuum
	Kiln drain	Cooling water

### Other Cleaning Related Equipment & Services:

- QA documentation packages
- Commissioning & SAT
- Equipment Qualification (IQ/OQ)
- Cleaning validation support
- Preventive maintenance
- Spare parts
- Phone support & emergency repairs
- CIP cycle development

[www.mcflusion.com](http://www.mcflusion.com)



## Contact Us

### McFlusion Corp.

1480 Sandhill Drive, #6  
Ancaster, ON L9G 4V5  
Canada

### McFlusion Inc.

2112 Case Pkwy S, #8  
Twinsburg, OH 44087  
USA

### McFlusion Aps

Ådalen 7  
DK-4600 Køge  
Denmark

Phone: 1-800-341-8616 • Fax: 1-877-934-6788 • Email: [mail@mcflusion.com](mailto:mail@mcflusion.com)



### Satellite office – US North West

20806 NE Sierra Dr.  
Bend, OR 97701  
USA

### Satellite office – US North East

4 Woodhaven Road  
Gibbsboro, NJ 08026  
USA

[www.mcflusion.com](http://www.mcflusion.com)

PREMIUM KNOWLEDGE • PREMIUM TECHNOLOGY • PREMIUM EQUIPMENT