

## 

# **Quick Reference Guide**

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#### 03 General Guidance & Specifications

#### Intended Use

The ZipChip Interface (ZCI) is a Microfludic Zone Electrophoresis (MZE) - Electrospray Ionization (ESI) source. It is available in two mounting configurations: ZCI Classic is designed to be used in conjunction with Thermo Exactive, Q Exactive and LTQ families of Mass Spectrometers (MS) while the ZC-Ti is designed for Thermo Orbitrap Fusion and TSQ2 Series MSs. The ZipChip Interface and its accessories/ consumables are intended for research use only.

#### General Safety Warnings

Do not use the ZipChip MZE-ESI unless properly trained in its safe operation. This equipment uses voltages which may result in injury. The ZipChip MZE-ESI system is a Class 1 Laser Product. Safety features have been incorporated in the design, but for continued safety, only trained personnel are allowed access to the equipment. Use only 908 Devices approved AC power supplies, cables, accessories and consumables. Contact 908 Devices directly to obtain any necessary additional, consumable, or replacement components. Damage to the device may result from improper use. The ZCI should only be operated in a clean laboratory environment. All maintenance should be performed by a qualified technician. Contact 908 Devices to obtain additional information.

#### Specifications

Physical (ZCI Classic):  $7" \times 6" \times 10.5"$ Physical (ZC-Ti):  $8" \times 7.5" \times 11.6"$ Weight: ~16lbs Power: 24V DC, 65W Certifications: UL/CSA/IEC 61010-1 3rd Edition Class 1 Laser Product: 21CFR 1040.10 & 1040.11 Ingress Protection: IP X0 (per IEC 60529) Operating Range: 20°C - 40°C Storage Temp: 0°C - 60°C

#### Manufacturer



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## **Getting Started** Device Setup & Installation

#### 05 ZipChip Interface Installation: ZCI Classic

#### **Step One** Thermo Exactive MS Configuration: MS Tune File/MS Standby

- 1. Save any unsaved/important changes in your existing Tune File.
- Create a new Tune File: click Save
   As and use ZipChip Default for your tune file name.
- 3. Put the MS into Standby Mode.

A Thermo Evactive Plus	: FMR — operational	
File windows Repor		
	🗅 6º26º2 🍂 🔺 🏹	
	• 5 6 8 5 0 3 🖊 LC	
📑 Instrument Cor	ntrol	
		-
N Scan paramet	ers	\$
History		
Scan range	70 to 1,000 m/z	
Fragmentation	None	
Resolution	17,500	
Polarity	Positive	
Microscans	1	
Lock masses	Off	
AGC target	5e6	
Maximum inject time	50	
Apply	Help Hot link	- 11
		-
ESI source		≈ =
		actual
Sheath gas flow rate	2	0
Aux gsd flow rate	0	0
Sweep gas flow rate	0	0

#### 06 ZipChip Interface Installation: ZCI Classic

### Step Two

Thermo Exactive MS Configuration: Mounting the ZCI to a Q Exactive, Exactive, LTQ or Orbitrap Series MS

- 1. Remove your existing source (if any), including the sweep cone.
- Mount the ZCI by aligning the mechanical mounts for the ZCI with the Thermo MS mounts.
- 3. Secure the ZCI on the MS mounts by turning the latches on the top of the ZCI system.



### 07 ZipChip Interface Installation: ZCI Classic

#### **Step Three** Thermo Exactive MS Configuration: MS ZCI Settings

- 1. Confirm that the Tune page recognizes an **ESI** source.
- With the MS still in standby mode, configure the settings shown at RIGHT for the ESI source.
  - Sheath gas flow rate: 2
  - Aux gas flow rate: 0
  - Sweep gas flow rate: 0
  - Spray voltage: 0
  - Capillary temp: 200
- 3. Save the Tune file **ZipChip Default**
- 4. Put the MS in the **ON** state.

Microscans		
Lock masses	Off	
AGC target	5e6	
Maximum inject time	50	
Apply	Help Hot link	
ESI source		\$
		actual
Sheath gas flow rate	2	2
Aux gsd flow rate	0	0
Sweep gas flow rate	0	0
Spray voltage (  kV  )	0.00	0
Spray current (μA)		0
Capillary temp. (°C)	200	200
Source Auto Defaul	ts	
Арріу Неір	HOT IINK	

#### **Step One** Thermo Orbitrap Fusion MS Configuration: MS Tune File/MS Standby

- 1. Save any unsaved/important changes in your existing Tune File.
- Create a new Tune File: click Save As and use ZipChip Default for your tune file name.
- 3. Put the MS into Standby Mode.

Thermo Scientific - Orbitrap Fus	ion Lumos		
Thermo Orbitrap F	USION LUMOS	Image: Constraint of the state of the st	
ION SOURCE DEFINE SCAN	CALIBRATION		
Scan Type	MS Scan 🔹		
Detector Type	Orbitrap 🔻	90	
Orbitrap Resolution	<b>15000</b> ▼	80	
Mass Range	Normal 🔻	70	
Use Quadrupole Isolation		60	
Scan Range (m/z)	500 - 2500	50	
RF Lens (%)	75	40	
AGC Target	1.0e5 <b>*</b>	30	
Maximum Injection Time (ms)	30 *	20	
Microscans	1	10	
Source Fragmentation			
Use Easy-IC		10 20 3	0
		# 7001 DT. 10.00 NI	. 7 41

#### 09 ZipChip Interface Installation: ZC-Ti

#### **Step Two** Thermo Orbitrap Fusion MS Configuration: Mounting the ZC-Ti to a Orbitrap Fusion or TSQ2 Series MS

- 1. Remove your existing source (if any), including the sweep cone.
- 2. Mount the ZCI by aligning the mechanical mounts for the ZCI with the Thermo MS mounts.
- 3. Secure the ZCI on the MS mounts by turning the latches on the top of the ZCI system.





### 10 ZipChip Interface Installation: ZC-Ti

#### **Step Three** Thermo Orbitrap Fusion MS Configuration: MS ZC Settings

- 1. Confirm that the Tune page recognizes a **Heated ESI** source.
- With the MS still in standby mode, configure the settings shown at RIGHT for the **Heated ESI** source.
  - Pos Ion Spray voltage: 0
  - Neg Ion Spray voltage: 0
  - Sheath gas flow rate: 2
  - Aux gas flow rate: 0
  - Sweep gas flow rate: 0
  - Ion Transfer Tube Temp: 200
  - Vaporizer Temp: 0
- 3. Save the Tune file **ZipChip Default**
- 4. Put the MS in the **ON** state.

T	Thermo Scient	ific - Orbitrap Fu	ision Lumos					
s c	hermo	Orbitrap I	Fusion Lumos			0 + Μ Σ	Positive Profile Avg. ( ) OFF	
I	ON SOURCE	DEFINE SCAN	CALIBRATION					
	Ion Source	Optimization						
	Current LC Flo	ow (µL/min)	0		800			
			Get Defaul	ts	700			
	Ion Source Ty	pe	Heated ESI	_	600			
	Pos Ion Spray	Voltage (V)	0	0.0	500			
	Neg Ion Spray	y Voltage (V)	0		500			
	Sheath Gas (A	urb)	2	2.0	400			
	Aux Gas (Arb)		0	0.3	300			
	Sweep Gas (A	rb)	0	0.0	200			
	Ion Transfer T	ube Temp (°C)	200	200.0	100			
	Vaporizer Terr	ıp (°C)	0	0.0				
					0		0.5	
					# 70	01 01	. 10.20	NIL 2 41

### **Step Four** Attach the ZCI Cables

- 1. Attach the MS Trigger cable and grounding cable to the ZCI.
- Connect the green terminal connector(s) of the MS trigger cable to the Peripheral Control port(s) on the MS.
- Connect the other end of the grounding cable to the ground bolt on the back of the mass spectrometer.
- 4. Plug in the ZCI AC power cable.
- Attach the USB cable to the ZCI and then the ZCI-controlling laptop/PC. The ZCI will not turn on until the USB connection is made on the ZCI.



#### **Step Five (Autosampler Only)** Attach the Autosampler Transfer Lines & Waste Tubing

- 1. Connect the BGE transfer line to the port labeled **BGE**.
- 2. Connect the Sample transfer line to the port labeled **Sample**.
- 3. Connections should be made finger tight.
- 4. See next two pages for identification of transfer lines.
- 5. Connect the two waste tubes to the hose barbs on the bottom of the ZCI and place the other ends of the waste tubing into an external, customer-supplied, locallyapproved waste container.



#### ZC Autosampler Plumbing Schematic





#### **Step Six** ZCI Operating Software

- 1. Open the ZipChip App.
- 2. Verify that the control software and video monitor screens both load fully.
- 3. If the computer cannot connect to the ZCI the software will open in off-line mode.

R ZpChip		- o x	X100e X1008/desizes		- o x
×908devices	Autosampler Settings		(=) Setting	Autosampler settings	
E) Setup	Left Tray Type 48 Vial * Left Tray Needle Height 1.0 mm		() (market	Right Tray Type 90 Well High • Left Tray Needle Height 10 mm	
Sequence	Right Tray Type 96 Well High * Right Tray Needle Height 1.0 mm		C aques	Current Tray Temp 😹 Right Tray Needle Height 10 mm	
•	Current Tray Temp 23C Sample Tray Temp 22 C		O Single	Sample Tray Cooling Sample Tray Temp 22 C	Unable to Connect to Camera
Single	Sample Yolume 2011			Bring Ray to Front	
	Bring Tray to Front				
		1. The second se		Chip Setup	
		/ 4			×
	Chip Setup				
	Chip ID HS000870 Lifetime 17/125			Failed to connect to the ZipChip. This app will operate	e in off-
				line mode.	
	Prime Autosampler Prime ZipChip BGE Refresh Test Bectrospray				
					OK
	Maintenance				
	Exchange Needle Exchange Syringe Dry Manhold				
	Apphysis Langing				
	Analysis cogging				
	Location C/ProgramData/90IDevices/ZpChip/Analysis Logs Default				
					Chip ID No Chip Present
					Pressure ① About
				Troublel	
		Chip ID HS000870		IIGANIGI	
		Chip Lifetime 17/125		If the Tip China area loads by	+
		Pressure 0.04 PSI () About		ii the ∠ip⊂nip app loads, bt	u seems

unable to communicate with the ZCI, ensure that the USB cable is connected and close and restart the ZipChip App.

#### **Navigation Panels**

#### Setup basic system setup and configuration ×908 devices Autosampler Settings Left Tray Needle Height 1.0 mr Left Tray Type 48 Vial Sequence Right Tray Type 96 Well High Sequence \* Right Tray Needle Height 1.0 mr -Current Tray Temp 250 Sample Tray Temp defines sequences/ Single Sample Tray Cooling Sample Volume 20u settings for ZipChip Bring Tray to Front Autosampler execution Chip Setup Chip ID HS000870 Lifetime 17/125 Single +configures/executes Prime Autosampler Prime ZipChip BGE Refresh Test Electrospray a single ZipChip injection/run Maintenance Exchange Needle Exchange Syringe Dry Manifold Analysis Logging Location C:/ProgramData/908Devices/ZipChip/Analysis Logs ... Default Chip ID H\$000870 Chip Lifetime 17/125 () About 0.04 PSI Pressure

## Setup Panel

Setup	Autosampler Settings	Autosampler Settings configure the autosampler
Sequence     Single	Right Tray Type     96 Well High     Right Tray Needle Height     10 mm       Current Tray Temp     10C     Sample Tray Temp     10C       Sample Tray Cooling     Sample Volume     20u     Image: Teap Temp	Chip Setup prime the autosampler and
	Chip Setup Chip D H500070 Lifetime 17/125	the ZipChip to test
	Maintenance Scharge Needle: Exharge Syntype Dry Manifolds	Electrospray is awesome! ENJOY!
	Analysis Logging Location C/ProgramData/668Devices/2grChip/Analysis Logs Default	Chip ID displays the chip type (HR or HS), the chip serial number, and the number of separations run on the chip
	Chp Uteline 17/25 Pressure 2.20 PS	

should read ~2psi

#### **Sequence Panel**

Open Save

Run Type

1 Analysis

2 Analysis

3 Analysis

4 Analysis

5 Analysis

6 Analysis

7 Analysis

8 Analysis

Analysis

10 Analysis

11 Analysis

12 Analysis

13 Analysis

14 Analysis

15 Analysis

16 Analysis

17 Analysis

18 Analysis

19 Analysis

20 Analysis

21 Analysis

22 Analysis

23 Analysis

Status: Idle

BGE Refresh

BGE Refresh

Sequence

Single

Edit Methods Method

HS Metabolites Preset

**HS** Metabolites Preset

HS Metabolites Preset

HS Metabolites Preset

HS Metabolites Preset

**HS** Metabolites Preset

**HS Metabolites Preset** 

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**HS** Metabolites Preset

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UC Motobolitor Drocot

Sample ID

LA1

Replicate

LA2

Replicate

LA3

Replicate

LA3

Replicate

LA1

Replicate

LA2

Replicate

LA3

Replicate

LA4

Replicate

LA1

Replicate LA2

Replicate

LA3

Replicate

1 44

Analysis Time (m)

2.0

2.0

2.0

2.0

2.0

2.0

2.0 2.0

2.0

2.0

2.0

2.0

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2.0

Run

Comment

+

() About

H\$000870

Pressure 0.04 PSI

Chip ID

Chip Lifetime 17/125

## O Sequence

File Management create, open, save, export, and edit sequences

#### Sequence Table

Control	s
contro	5

run/stop/pause a sequence & status indicator

#### Sequence Panel New/Open



<b>Sequence Panel</b> Edit Methods			
Sequence > Edit Me	ethods		
Method Parameters	New Open Save Est Method Run Type Metho Analysis HS Metaboliti 2 Analysis HS Metaboliti 3 Analysis H	s od Sample ID Analysis Time (m) es Preset LA1 2.0 Thethods	Comment
Method List Default Parameter Values	4     Analysis     HS     HR II       6     Analysis     HS     HR     HR       6     Analysis     HS     HR     HR       7     Analysis     HS     HR     HR       8     Analysis     HS     HR     HR       9     Analysis     HS     HS     HS       10     Analysis     HS     HS     HS       11     Analysis     HS     HS     HS       12     Analysis     HS     HS     HS       13     Analysis     HS     HS     HS       14     Analysis     HS     HS	ntact mAb ● Method Native mAb Peptides Pre- imall Proteir Peptides Aletabolites I BGE Type Viscosity ♥ Pressure Assist Start Time	1000 V/cm       :         5.00 nL       :         24.26 sec       ■         HS       •         Metabolites       •         1.43 cP       :         2.0 min       :
Add/Remove/ Import/Export create new methods and remove old ones	15 analysis HS BGE Refresh 17 Analysis HS 19 Analysis HS 20 Analysis HS 21 Analysis HS 21 Analysis HS 22 Analysis HS 23 Analysis HS 23 Analysis HS 33 Analysis HS	Replicate Delay       Set to Default Values       HS Metabolites     HR Metabolite       HR Peptides     HR Intact Antibo	30 sec

#### Sequence Panel In Action

O Sequence

	Run Type	Method	Sample ID	Analysis Time (m)	Comment	No. of the second se
1 🥥	Analysis	HS Metabolites Preset	LA1	2.0		- AL
2	Analysis	HS Metabolites Preset	Replicate	2.0		
3	Analysis	HS Metabolites Preset	LA2	2.0		
4 🔘	Analysis	HS Metabolites Preset	Replicate	2.0		
5 🔘	Analysis	HS Metabolites Preset	LA3	2.0		1
6 🔘	Analysis	HS Metabolites Preset	Replicate	2.0		
7 🔘	Analysis	HS Metabolites Preset	LA3	2.0		
8 🔘	Analysis	HS Metabolites Preset	Replicate	2.0		
Ō	BGE Refresh					
9 🔘	Analysis	HS Metabolites Preset	LA1	2.0		
10 🔘	Analysis	HS Metabolites Preset	Replicate	2.0		
11 🔘	Analysis	HS Metabolites Preset	LA2	2.0		
12 🔘	Analysis	HS Metabolites Preset	Replicate	2.0		
13 🔘	Analysis	HS Metabolites Preset	LA3	2.0		
14 🔘	Analysis	HS Metabolites Preset	Replicate	2.0		
15 🔘	Analysis	HS Metabolites Preset	LA4	2.0		
16 🔵	Analysis	HS Metabolites Preset	Replicate	2.0		
0	BGE Refresh					
17 🔘	Analysis	HS Metabolites Preset	LA1	2.0		
18 🔘	Analysis	HS Metabolites Preset	Replicate	2.0		
19 🔘	Analysis	HS Metabolites Preset	LA2	2.0		
20 🔘	Analysis	HS Metabolites Preset	Replicate	2.0		
21 🔘	Analysis	HS Metabolites Preset	LA3	2.0		
22 🔘	Analysis	HS Metabolites Preset	Replicate	2.0		
23	Analysis	UC Matshalitas Deseat	1 44	2.0		

### **Single Panel**



#### **Single Panel** Analysis Procedure



- Select the ZipChip method from the drop-down menu.
- To load a sample from the autosampler, select the location from the drop-down menu.
- To pipet a sample into the Sample well, set the sample location to Manual.
- Fill in remaining Run Settings and press **Run**.



The ZipChip is a microfluidic zone electrophoresis chip with an integrated nano-ESI emitter. There are four reservoirs on the TOP of the chip as shown at right.

#### Note:

Take care when handling a ZipChip out of its packaging/holder to avoid damaging the ESI emitter corner of the chip.





Each ZipChip is serialized, and contains a microchip storing characteristics of each chip, its serial number, and chip type (e.g. HS or HR). These parameters will be automatically read by the ZipChip software.

#### 25 ZipChip Interface

#### Internal Overview ZipChip Interface Chip Bay

Elements of the ZCI Chip Bay are highlighted and labeled at RIGHT.

The following pages provide a 6 step guide for loading/ priming a ZipChip.



#### 26 ZipChip Interface

## Loading a ZipChip



#### 27 ZipChip Interface



#### 28 Priming the ZCI-AS System

- In the Setup window of the ZipChip software, click **Prime Autosampler** and follow the on-screen prompts.
- Load a fresh bottle of ZipChip BGE\* into the ZipChip Autosampler.
- 3. Insert a blank chip.
- 4. Once the autosampler prime is complete, you may proceed to priming a ZipChip.

\*When switching from one BGE type to another, it is advisable to first run a Dry Manifold operation and then the Prime Autosampler procedures with LCMS grade DI water to ensure the system is thoroughly flushed before priming with the new BGE.

$\bigcirc$		Autocampler Settings     Left Tay Type     Note     Kept Tay Type     Note     Connect Tay Type     Connect Tay	Left Tay Navila Height 10 mm     High Tay Navila Height 10 mm     Single Tay Navila Height 10 mm     Single Tay Navila 10 mm     Single Tay Navila 10 mm     Single Tay Navila 10 mm	
(1)		Olp Stap Olp 9 vannt Markaangin Markada, Kalana, ka	Litier 115	-//
		Maintenance Extrapolisation Analysis Logging Insete: ChromotherMinistry Turble dedictions		
Prime Autosampler	Prime ZipChip	BGE Refresh	Test Electrospra	у
				000819 133125 Pressure 8.34.951



#### 29 **Priming a ZipChip**

- Load a ZipChip HS or HR chip into the ZCI and select Prime ZipChip.
- 2. Follow the ZipChip app onscreen instructions to prime the chip.
- 3. Test the electrospray.







Your Autosampler and Chip are now ready for operation.

#### **Software** Setup Panel

E Setup		
Setup is simplified compared to the AS version of the app	Chip Setup Chip ID H500870 Lifetime 17/125 Prime ZpChip Test Decropray Maintenance	
Chip Setup prime the ZipChip & test electrospray	Dry Marikoli Analysis Logging Location C/ProgramDMa/908Devices/ZjpChip/Analysis Logs DHauit	-//
Chip ID displays the chip type (HR or HS), the chip serial number, & the number of separations run on the chip		
Pressure should read ~2psi		Chip ID H5000870 Chip Ufetime 17/125 Pressure 0.04 PSI ① About

#### Software **Analysis Panel** Analysis )Panel replaces Single ×908 devices panel from the AS · Edit Method Method HS Metabolites Preset version of the app Field Strength Start BGE Type Metabolites 1000 V/cr and the Sequence Injection Volume Pressure Assist Enabled panel is no longer P. Assist Start Time 2.0 minutes Chip Type HS **Replicate Delay** 30 se present Run Settings Method Sample Location Manual Analysis Time 2.0 minute +description & selection # of Analyses 1 **Run Settings** Controls run/stop a sequence & status indicator Chip ID H\$000870 Status: Idle Chip Lifetime 17/125 Stop () About Pressure 2.22 PSI

## Priming a ZipChip

- 1. Load a ZipChip HS or HR chip into the ZCI and select **Prime ZipChip**.
- 2. Follow the on-screen manual priming wizard instructions to prime the chip.
- 3. Test the electrospray.







Your ZipChip is now ready for operation.

## Loading a Sample

The manual ZCI requires the user to pipet the sample directly into the sample well.

It is recommended that sample volumes be 10-40  $\mu\text{L}.$ 

The sample well should be thoroughly rinsed prior to and between sample loads to minimize carry-over and contamination.

Sample Well

#### Accessing the Customer Portal

#### Visit the **my.908devices.com**

Customer Portal to find the latest ZipChip software release and helpful documentation including a Sample Preparation Guide, Analysis Protocols and Training Materials.

The ZipChip Interface serial number, which can be found on the inside of the door is required to activate your my.908devices account.



# Troubleshooting & Safety

Solving Common ZCI Issues

#### 36 **Troubleshooting**

#### lssue

#### Possible Causes

The ZCI does not power on, fails to connect to the ZipChip software or does not respond to changes in the software

- The power supply cable is not connected
- The USB cable is not connected to the ZCI

#### Solutions

- Ensure the power supply cable is properly connected to the ZCI and a functional wall outlet
- Ensure the USB cable is properly connected between the ZCI and the ZCI control PC. Restart the ZCI.
- Power cycle ZCI by removing power cable.
- Power cycle the autosampler if applicable.
- Try additional USB ports on the ZCI control PC.
- Restart the ZipChip software and the control PC

No electrospray is observed

- The door interlock is open (voltages will not come on with door open).
- There is no pressure applied to the chip.
- Chip not primed properly.

🗙 Electrospray is unstable

- The pressure applied to the chip is unstable or not properly set
- Sample composition may be causing spray instability

Ensure
 Ensure

- Ensure that the door is closed and latched.
- Ensure the MS system is on and pressure reading in the ZipChip software is  ${\sim}2$  psi.
- Check to see if wells have liquid in them and reprime.
- Confirm that the Sheath Gas pressure in the MS Tune page is set to 2. Monitor the manifold pressure in the bottom right of the ZipChip app. If the pressure isn't stable at ~2 psi contact the Help line at 908 Devices.
- If ESI is stable to begin w/ but becomes unstable over the course of an analysis ensure the sample meets the guidelines outlined in the ZipChip Sample Guide.

The MS does not start collecting data upon ZCI analysis

- The MS Trigger cable is not properly connected
- The Xcalibur software configurations are not set properly

- Ensure that the MS Trigger cable is properly connected (Refer to ZCI Installation instructions on pg. 5)
- Ensure your Thermo Xcalibur settings are configured to properly accept a contact closure trigger (Refer to the appropriate Thermo MS user manuals)

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## Still having trouble?

For all other issues, or if you require further assistance or information about ZipChips and the ZipChip Interface, contact 908 Devices support at:

> help@908devices.com 1-844-908-HELP (4357)

This product and its consumables are protected by one or more patents. See www.908devices. com/patents for more information. ZipChip and ZipChip Interface are registered trademarks of 908 Devices Inc. For more information on 908 Devices' products visit www.908devices.com

#### 38 Safety



There are live, high voltages present inside the unit during operation.



This equipment contains a 520 nm, 4.5 mW Class 3R laser diode with a beam divergence of 1.5 mrad but is classified as a Class 1 Laser Product as an end-use as evaluated to IEC 60825-1:2014. Avoid direct eye exposure to the beam and do not remove the laser for any other purpose.



Caution - Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

The internal fuse is not user accessible. Return to the manufacturer for repair.

Verify waste bottle is empty before use and dispose of waste liquid in accordance with local laws.

The end-user shall determine what personal protective equipment (PPE) is required per existing standard operating procedures and use standard protocols for chemicals and other potential hazardous materials.

Return the equipment to the manufacturer, or the manufacturer's representative for all servicing.

#### Your ZipChip Interface, associated ZipChips, and associated consumables rely on a range of patented or patent-pending technologies: www.908devices.com/patents/

**WARRANTY:** Seller warrants that the Products will operate or perform substantially in conformance with Seller's published specifications and be free from defects in material and workmanship, when subjected to normal, proper and intended usage by properly trained personnel, for the period of time set forth in the Seller's quote, for Products, or if none indicated then as specified in. Seller's product documentation, published specifications or package inserts. If a period of time is not specified in Seller's quote, product documentation, published specifications or package inserts. If a period of time is not specified in Seller's quote, product documentation, published specifications or package inserts, the warranty period shall be one (1) year from the date of shipment to Buyer for equipment, and the sooner of six (6) months packaged, fourteen (14) days once packaging is opened or 100 normal sample runs for consumable separation chips (the "Warranty Period"). Seller agrees during the Warranty Period, to repair or replace, at Seller's option, defective Products so as to cause the same to operate in substantial conformance with said published specifications; provided that Buyer shall (a) promptly notify Seller in writing upon the discovery of any defect, which notice shall include the product model and serial number (if applicable) and details of the warranty claim; and (b) after Seller's review, Seller will provide Buyer with service data and/or a Return Material Authorization ("RMA"), which may include biohazard decontamination procedures and other product-specific handling instructions, then, if applicable, Buyer may return the defective Products to Seller with all costs prepaid by Buyer. Replacement parts may be new or refurbished, at the election of Seller. All replaced parts shall become the property of Seller. Shipment to Buyer of repaired or replacement Products shall be made in accordance with the Delivery provisions of the Seller's Terms and Conditions of Sale. Consumables are expressly excluded from t

Notwithstanding the foregoing, Products supplied by Seller that are obtained by Seller from an original manufacturer or third party supplier are not warranted by Seller, but Seller agrees to assign to Buyer any warranty rights in such Product that Seller may have from the original manufacturer or third party supplier, to the extent such assignment is allowed by such original manufacturer or third party supplier.

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All components shall be disposed of properly, as required by local authorities and jurisdictions.





# ×908 devices

#### **Technical Specifications**

7″ x 6″ x 10.5″
8″ x 7.5″ x 11.6″
~16lbs
24V DC, 65W
UL/CSA/IEC 61010-1 3rd Editior
21CFR 1040.10 &1 040.11
IP X0 (per IEC 60529)
20°C - 40°C
0°C - 60°C
110/240V/75W

#### ZCI Power Supply

Supplier	
P/N	
nput	
Output	
Barrel	

CUI Inc SD165-24-UD-P5 90-264V~, 50-60Hz, 1.4A 24V, 2.71A 5.5 x 2.1 mm, center pin +V

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