Quick Start Guide

Micro GC Fusion® Quick Start Guide

Introduction

This quick start guide is designed to instruct the user on the steps required to install Micro GC Fusion and assumes the user is familiar with gas chromatographs. It is recommended that inexperienced users refer to 074-594-P1 Micro GC Fusion Operating Manual for in-depth procedures. The operating manual is available for download from the Micro GC Fusion product web page located at https://www.inficon.com/products/gas-analysis/micro-gc-fusion-gas-analyzer or by following the QR code at the top of the document.

Proper Site Preparation

Proper site preparation prior to installing Micro GC Fusion is very important. Ensure all materials outlined by 074-615-P1 Micro GC Fusion Pre-Installation Checklist are readily available at the installation site. The pre-installation checklist is available for download from the Micro GC Fusion product web page located at https://www.inficon.com/products/gas-analysis/micro-gc-fusion-gas-analyzer or by following the QR code at the top of the document.



⚠ WARNING

Gas cylinders may present a hazard under extreme temperature conditions. Do not store gas cylinders in the path of heated oven exhausts or other sources of heat. Do not expose cylinders to extreme cold or heat.

It is recommended to store or place cylinders in a temperature-controlled environment.

Quick Start Guide

✓ Verify the contents of the order to assure Micro GC Fusion, accessories, consumables, and checkout gases are present and in acceptable condition. If items are missing or damaged, contact INFICON by visiting www.inficon.com and selecting **Service & Support**.

1 Unpack Micro GC Fusion and place it on a flat, stable surface.

NOTICE

Micro GC Fusion air pathways must remain unobstructed to allow cooling of the analytical column(s) following a temperature programmed method run.

Allow a minimum of 6.5 cm (2.5 in.) clearance to the top, the front, the back, and both sides of the instrument to provide unrestricted air flow to the instrument.

NOTICE

Ensure the Micro GC Fusion fan exhaust at the back of the instrument is not blocked and the air flow through the bottom of Micro GC Fusion is unobstructed.

2 Before connecting the carrier gas line(s) to Micro GC Fusion, assemble the carrier gas line(s) and purge them for 10 to 30 seconds at low pressure (5–10 psi) in order to remove air from the regulator and carrier gas line(s). Assemble in the following order: 1) regulator, 2) traps, 3) tubing, and 4) particulate filter.

Carrier Gas Tank
(Minimum purity 99.995%,
customer provides)



↓

Dual-Stage Pressure Regulator
(Output pressure range: 60–62 psi,
IPN: 952-416-P1 for CGA 580 or
IPN: 952-415-P1 for CGA 350)



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Moisture & Hydrocarbon Trap
(IPN: G2870A-1,
purchase from INFICON)



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Shut-Off Valve
(IPN: 059-0442,
included in 952-021-G1)



↓

Carrier Gas Filter
(IPN: 059-0701,
included in ship kit)



↓

1/8-inch Swagelok Brass Fittings
(IPN: 0590554 and 059-0714,
included in 952-021-G1)



↓

Micro GC Fusion





Linked by copper tubing,

IPN: 5021-7107, 10 feet
included in 952-020-G1 or
IPN: 5180-4196, 50 feet
included in 952-021-G1



⚠ WARNING

Gas cylinders present a hazard when not secured properly. Securely fasten all compressed gas cylinders to an immovable structure or permanent wall. Store and handle compressed gases in accordance with safety procedures.



⚠ CAUTION

Wear eye protection when using compressed gas.

3 Connect the carrier gas particulate filter:

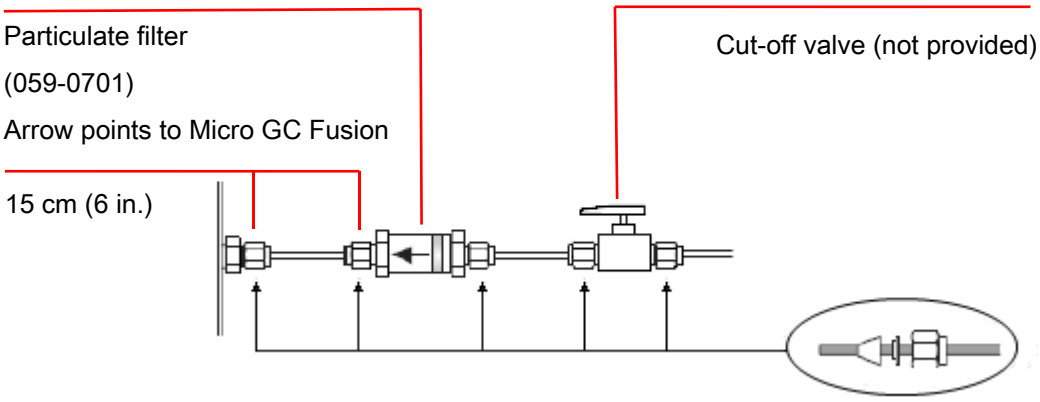
⇨ Remove the shipping caps from the Micro GC Fusion carrier gas inlet.

⇨ Install one carrier gas particulate filter (PN 059-0701) on the carrier gas supply tubing for each carrier gas used, as shown below. Do not connect the tubing directly to Micro GC Fusion.

NOTICE

The carrier gas particulate filter prevents particles in the carrier gas from entering Micro GC Fusion.

Connecting carrier gas tubing directly to the carrier gas inlet without installing the carrier gas particulate filter may damage Micro GC Fusion.



4 Connect the carrier gas line(s) to the Micro GC Fusion carrier gas inlet on the back of the chassis. CARRIER C1 will provide carrier gas to Module A and Module B if CARRIER C2 is not configured. CARRIER C2 will provide carrier gas to Module B only, if configured. On a 4-Module chassis, CARRIER C3 will provide carrier gas to Module C and Module D if CARRIER C4 is not configured. CARRIER C4 will provide carrier gas to Module D only, if configured.



4-module Micro GC Fusion back panel



2-module Micro GC Fusion back panel

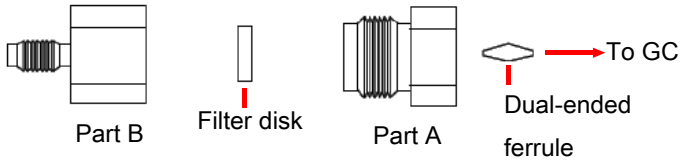
5 Set the output pressure on the dual-stage regulator on the carrier gas tank to 60 psi.

NOTICE

Carrier gas inlet (rear of instrument) pressure must be between 400 and 427 kPa (58 and 62 psi). Use a dual-stage regulator on the carrier gas cylinder to ensure the pressure range is maintained.

Exceeding 565 kPa (82 psi) may damage Micro GC Fusion and require factory repair.

6 Install the sample inlet filter (PN 952-423-P1). Inspect the sample inlet filter assembly and verify that the filter disk is in place. If not, place a filter disk between Part A and Part B of the filter body and screw the parts together until finger-tight.
Place the dual-ended ferrule inside Part A. Connect the sample inlet filter to the sample inlet. Turn Part A clockwise until finger-tight, then use a 5/16 in. wrench to tighten an additional 1/4 turn.
Connect the sample line to the male portion of filter Part B while stabilizing the sample inlet filter assembly Part B with a 7/16 in. wrench.



NOTICE

Do not overtighten the sample inlet filter assembly to Micro GC Fusion.

This will damage the dual-ended ferrule.

7 If using a computer to communicate with Micro GC Fusion, connect one end of the LAN cable (PN 600-1190-P4) to the instrument RJ45 port. Connect the other end of the LAN cable to the computer, the network switch, or the router connected to the computer.



4-module Micro GC Fusion back panel

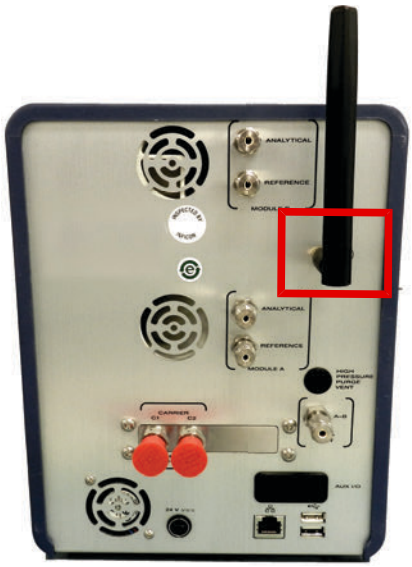


2-module Micro GC Fusion back panel

8 Remove the Wi-Fi antenna from the ship kit and install it on Micro GC Fusion by tightening the antenna onto the Wi-Fi port on the back of the instrument.



4-module Micro GC Fusion
back panel



2-module Micro GC Fusion
back panel

9 Connect the power supply. Refer to the specific instructions below for 2-module or 4-module Micro GC Fusion.

⇨ **2-module Micro GC Fusion**
The 2-module Micro GC Fusion uses a 24 V (dc) Power Supply (PN 952-435-G2). Connect the country-specific power cord supplied with the instrument to the appropriate port on the 24 V (dc) power supply. Connect the 24 V (dc) power connector to Micro GC Fusion. Plug the other end of the power cord into an 100–240 V (ac) power socket. A click will be audible when the power connector is properly connected.

⇨ **4-module Micro GC Fusion**
The 4-module Micro GC Fusion uses a power supply that accepts 100–240 V (ac) input. A 24-volt power supply is built into the chassis and is not required externally. Connect the power cord to the AC power inlet and properly ground the instrument through the grounding connector.



4-module Micro GC Fusion
back panel



2-module Micro GC Fusion
back panel

10 Power on Micro GC Fusion. Refer to the specific instructions below for 2-module or 4-module Micro GC Fusion.

⇨ **2-module Micro GC Fusion**
Press the ON/Standby button to power on Micro GC Fusion. The front panel will display the instrument hostname and IP address in the upper right-hand corner. The default hostname set in the factory is <instrument serial number>.local, for example, 70069207.local.

⇨ **4-module Micro GC Fusion**
Press the on/off switch at the back panel to apply power to the 4-module Micro GC Fusion. Then press the ON/Standby button to power on 4-module Micro GC Fusion. The front panel will display the instrument hostname and IP address in the upper right-hand corner. The default hostname set in the factory is <instrument serial number>.local, for example, 70069207.local.



4-module Micro GC Fusion
front panel



2-module Micro GC Fusion
front panel

11 Micro GC Fusion adopts a dynamic IP address and runs Dynamic Host Configuration Protocol (DHCP) by default. This means no static IP address is preassigned from the factory. When Micro GC Fusion is connected to a computer through a direct Ethernet cable and the computer is configured to accept an IP address automatically, Micro GC Fusion will dynamically assign an IP address to the computer such that both devices are connected automatically.

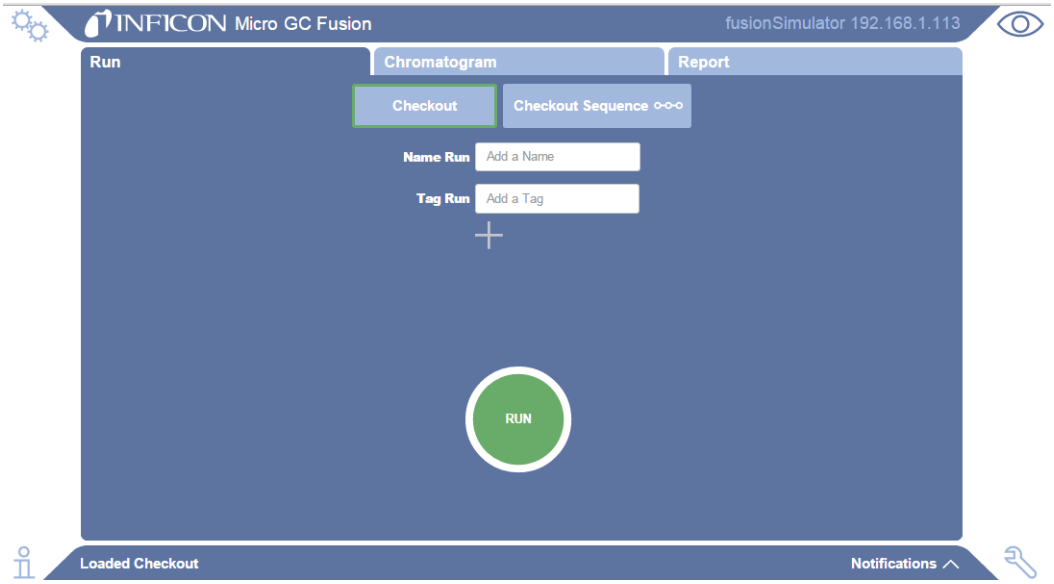
12 In a supported web browser, type the hostname or IP address of Micro GC Fusion into the address bar and press the **Enter** key. The Micro GC Fusion main page will display.

Web browsers including the latest version of Google Chrome, Mozilla Firefox, and Internet Explorer are supported.

Refer to 074-594-P1 Micro GC Fusion Operating Manual for support on older web browser versions.

Bonjour Print Service for Windows is required for a Windows computer to recognize the hostname in a web browser.

The software is available for download at http://support.apple.com/kb/DL999.



13 Micro GC Fusion can be configured for Wi-Fi communication. Connect the Wi-Fi-enabled device to the Micro GC Fusion Wi-Fi network, which is <instrument serial number>.local. In a supported web browser, type **10.10.0.1** into the address bar and press the **Enter** key. The Micro GC Fusion main page will display.

14 For more detailed instructions regarding installation, software operation, and routine operation, refer to 074-594-P1 Micro GC Fusion Operating Manual. This operating manual can be found by clicking the icon located in the lower-left corner of the Micro GC Fusion main page or by downloading it from the Micro GC Fusion product web page located at https://www.inficon.com/products/gas-analysis/micro-gc-fusion-gas-analyzer or by following the QR code at the top of the document.

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