

# Laser Ablation Connectors

Laser Ablation is a rapidly growing sample introduction system for the introduction of solids into ICP-MS and ICP-OES. The technique is widely used in geochemical, isotopic and environmental analysis, and is also a growing area of research in multi-element imaging of biological materials.

## P/N: 21-809-4309

S13 (13mm) Ball and Cup 'T'

The S13 (13mm) ball and Cup connector ([21-809-4309](#)) can be used to provide an input from a laser ablation system and pneumatic nebulization for calibration. This adaptor is used when suitable solid standards are not available.



## P/N: 70-803-1600

For routine "bulk analysis" Laser Ablation, the cell output can be connected to ICP torch and make up gas added using ([70-803-1600](#)). This mixing chamber allows the ablation cell gas flow to be optimized separately from that of the plasma injector gas flow rate ensuring the best laser ablation performance without compromising plasma performance. It is designed to connect directly to the ICP torch by way of the S13 (13mm) cup and included metal ball joint clip. Also included is P/N [GAZ-06-3.2B](#), design to directly connect soft-walled 1/8 inch ID tubing from the outlet of the Laser to the mixing chamber. (Compatible with the Agilent® 77/78/79/88/8900 ICP-MS)



## P/N: 31-808-4034

This low volume laser ablation adapter ([31-808-4034](#)) with tangential make-up gas input is used with low dead-volume laser ablation cells to directly connect with the ICP-MS torch to maintain signal intensity and precision and minimizing washout. A zero dead-volume fitting connects a 1/16" OD PEEK capillary transfer tube and an S13 (13mm) cup outlet directly connects to the ICP-MS torch without the need for complex and difficult to use direct injection torches. When used with the Agilent® ICP-MS, this adapter connects directly to the torch whilst keeping all connections outside the torch box. (Compatible with the Agilent® 77/78/79/88/8900 ICP-MS)



## P/N: 20-809-4550

Laser Ablation Mixing Chamber with S13 (13mm) Ball Joint. Designed for routine Laser Ablation, where the cell output to the ICP torch requires a mixing chamber/damper. The mixing chamber is designed to work with Teledyne™ Photon Machines Aris.



## P/N: 31-808-3863

Connect your rigid 4mm OD/2mm ID laser ablation tubing directly to your Thermo Fisher Scientific™ ICP-MS torch using adapter P/N [31-808-3863](#) in combination with P/N [GAZ-04U](#). (Compatible with Thermo™ Q/RQ/TQ and TOFWEK™ icpTOF)



## P/N: 21-809-2801

Use P/N [21-809-2801](#) torch adapter to connect any S13 (13mm) cup laser ablation adapter (see page 2 for listing) to your Thermo Fisher Scientific™ ICP-MS torch. (Compatible with Thermo™ Q/RQ/TQ and TOFWERK™ icpTOF)



## P/N: 31-808-4289

When an additional gas stream is required to be introduced, use P/N [31-808-4289](#) torch adapter, to connect any S13 (13mm) cup laser ablation adapter to your Thermo Fisher Scientific® ICP-MS torch (Compatible with Thermo® Q/RQ/TQ and TOFWERK™ icpTOF)



## P/N: 31-808-4107

Use P/N [31-808-4107](#) torch adapter to connect any S13 (13mm) cup laser ablation adapter to your PerkinElmer® ICP-MS torch. (Compatible with PerkinElmer® NexION 1000/2000/5000)



## S13 (13 mm) cup Adaptors

**P/N: 31-800-1007**

Connect to 4mm rigid tubing by a “push-fit” seal

ID: 4mm



**P/N: 21-809-4140**

Connect to 4mm and 8mm tubing by way of [GAZ-04U](#) and [GAZ-08U](#) or [GAZ-04](#) and [GAZ-08](#)

OD: 8mm  
ID: 4mm



**P/N: 21-809-0965C**

Connect to 6mm tubing by way of [GAZ-06U](#) or [GAZ-06](#)

OD: 6mm  
ID: 4mm



**P/N: 31-808-3045**

Connect to 4mm tubing by way of [GAZ-04U](#) or [GAZ-04](#)

OD: 4mm  
ID: 2mm



**Table 1. GazFit Union Connectors (for rigid walled tubing)**

Part Number	Description
<a href="#">GAZ-04U</a>	GazFit Union 4mm (PKT.2)
<a href="#">GAZ-06U</a>	GazFit Union 6mm (PKT.2)
<a href="#">GAZ-08U</a>	GazFit Union 8mm (PKT.2)



(eg. P/N 21-809-0965C with GAZ-06U)

**Table 2. Standard GazFit Connectors (for soft walled tubing)**

Part Number	Description
<a href="#">GAZ-04</a>	GazFit Connectors for 4mm OD side arm (PKT.4)
<a href="#">GAZ-05</a>	GazFit Connectors for 5mm OD side arm (PKT.4)
<a href="#">GAZ-06</a>	GazFit Connectors for 6mm OD side arm (PKT.4)
<a href="#">GAZ-08</a>	GazFit Connectors for 8mm OD arm (PKT.2)
<a href="#">GAZ-0604</a>	GazFit Connectors, 2 for 6mm OD side arms, 2 for 4mm OD side arms (PKT.4)
<a href="#">GAZ-06-3.2B</a>	GazFit Connectors for 6mm OD side arm with connection for 1/8inch ID tubing (PKT.4)



(eg. P/N 21-809-0965C with GAZ-06)

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