



IRMS

Sensitivity	Absolute sensitivity of CO ₂ (molecules/ion)	850 1200	DI mode CF mode
H ₃ ⁺ correction factor		< 8.0 ppm/nA	
H ₃ ⁺ factor stability		< 0.03 ppm/nA/hr	
Mass Resolution	(10% valley definition)	100	
Abundance Sensitivity		< 4ppm	

Dual Inlet

Gas	Isotope	Sample Size bar μ L	Internal Precision 2 σ ‰
CO ₂	$\delta^{13}\text{C}$ $\delta^{18}\text{O}$	100	≤ 0.010 ≤ 0.016
CO ₂	$\delta^{13}\text{C}$ $\delta^{18}\text{O}$	> 1 <i>using cold finger</i>	≤ 0.020 ≤ 0.030
N ₂	$\delta^{15}\text{N}$	100	≤ 0.010
O ₂	$\delta^{18}\text{O}$	100	≤ 0.010
H ₂	δD	200	≤ 0.10
SO ₂	$\delta^{34}\text{S}$	100	≤ 0.010

MultiPrep

Sample Type	Sample Size	Gas	Isotope	External Precision 1 σ ‰
Carbonate	20ug	CO ₂	$\delta^{13}\text{C}$	≤ 0.04
		CO ₂	$\delta^{18}\text{O}$	≤ 0.08
Water	200ul	CO ₂	$\delta^{18}\text{O}$	≤ 0.05
		H ₂	δD	≤ 1.0

Manifold/Crackers

Sample type	Gas	Isotope	External Precision 1 σ ‰
Manifold	CO ₂	$\delta^{13}\text{C}$	≤ 0.02
Manifold	CO ₂	$\delta^{18}\text{O}$	≤ 0.04
Cracker	CO ₂	$\delta^{13}\text{C}$	≤ 0.02
Cracker	CO ₂	$\delta^{18}\text{O}$	≤ 0.04

Notes:

All specifications are correct as of 15th Dec 2009. Isoprime Ltd reserve the right to change the specification level at any time without prior notice. Specifications presented here do not represent contractual obligations. Specifications will be performed by a trained Isoprime engineer using only Isoprime supplied samples. Specifications will be performed using standard weights of natural abundance samples and analysed a limited number of times. Enhanced specifications may be possible, please contact your local representative for more details. Not all specifications will be demonstrated on installation unless with prior agreement