

HAA-RR™

Rapid Response Benchtop HAA Analyzer

The rapid response benchtop HAA-RR™ analyzer provides fast, reliable and accurate analysis of individual and total HAA concentrations.

For water treatment operators, consulting engineers, and HAA treatment system vendors the HAA-RR delivers valuable HAA performance data faster than external laboratories.

HAA-RR™ Features

Automated Operation

- Easy to use
- Results in 80 minutes
- Optional auto sampler provides rapid unattended analysis for up to 12 samples
- Operate in on-line or grab sample analysis modes

Comprehensive data

- Sampling frequency of 1 sample per 80 min
- HAA speciation data provided for HAA5/HAA9
- Integrates with SCADA

Operational Optimization

- Replaces reliance on external laboratories for performance control
- Gives operators confidence in real-time HAA levels to ensure regulatory compliance
- Enables near-real time tracking and response for HAA control

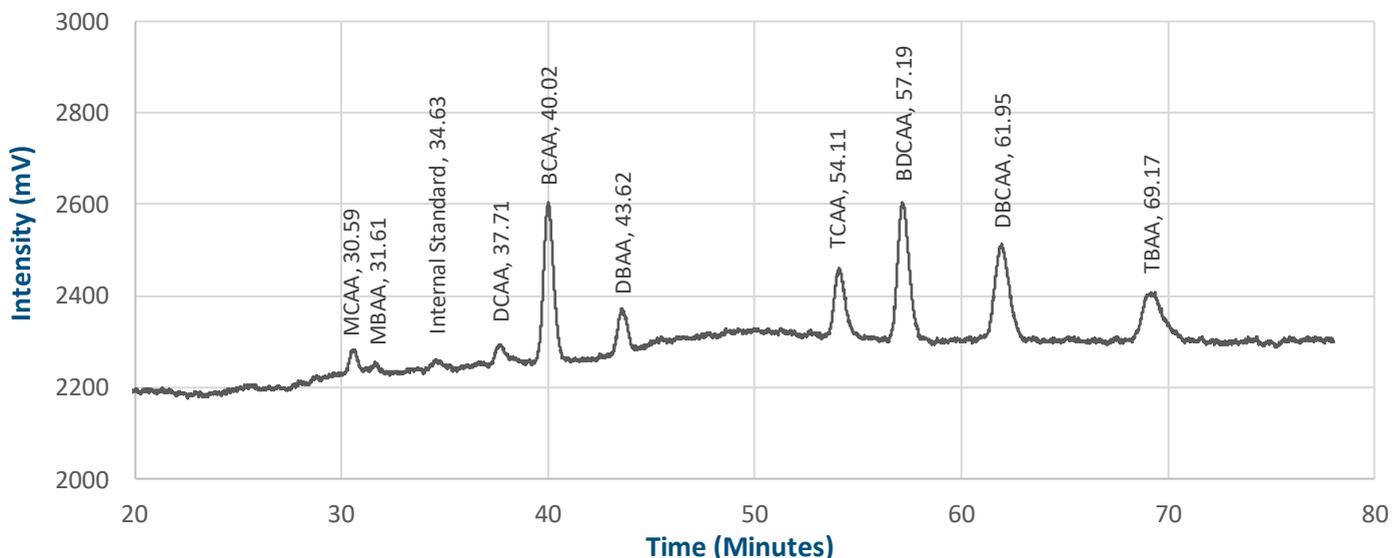
Typical configuration of the HAA-RR™ system.



HAA-RR™ Applications

- Water system operators seeking to ensure cost-effective compliance with DBP regulations
- Consulting engineers working to characterize HAA problems in a timely, comprehensive and accurate manner
- Utilities and engineers looking to undertake rapid evaluation of HAA treatment pilot systems, minimizing cost and time
- Utilities looking to undertake accurate, cost effective and timely acceptance testing of a newly installed HAA treatment system

HAA-RR™ Chromatogram (20 ppb Standards)



HAA-RR™ Specifications

Performance			
Approximate Quantification Range			
HAA5	Monochloroacetic acid (MCAA)	CH ₂ ClCO ₂ H	3 – 60 ppb
	Monobromoacetic acid (MBAA)	CH ₂ BrCO ₂ H	15 – 60 ppb
	Dichloroacetic Acid (DCAA)	CHCl ₂ CO ₂ H	8 – 60 ppb
	Dibromoacetic Acid (DBAA)	CHBr ₂ CO ₂ H	5 – 60 ppb
	Trichloroacetic Acid (TCAA)	CCl ₃ CO ₂ H	3 – 60 ppb
HAA9	Bromochloroacetic Acid (BCAA)	CHBrClCO ₂ H	2 – 60 ppb
	Bromodichloroacetic Acid (BDCAA)	CBrCl ₂ CO ₂ H	1 – 60 ppb
	Dibromochloroacetic Acid (DBCAA)	CBBr ₂ ClCO ₂ H	3 – 60 ppb
	Tribromoacetic Acid (TBAA)	CBr ₃ CO ₂ H	4 – 60 ppb
Sample Size		20 mL	
Average Sample Time		80 minutes	

Operating Environment	
Temperature	5 – 35 °C (41 – 95 °F)

Facility Requirements	
Water	“HAA free” water, reagent water or distilled water
Electrical	120 Vac, 10 A, ~50/60Hz

Hardware	
Physical Size	24” W x 20” D x 24” H
Weight	55 lbs (25 kg)

Warranty & Service	
Options	Annual Service Contract 1 year Warranty
* Note- specifications are subject to change without notification.	