

Mercury analyzer
mercur



mercur[®]

	mercur	mercur AA	mercur DUO
Technique	PC controlled fully automatic Hg-analyzer, based on cold vapour technique and atomic fluorescence	PC controlled fully automatic Hg-analyzer, based on cold vapour technique and atomic absorption	PC controlled fully automatic Hg-analyzer, based on cold vapour technique and atomic fluorescence and atomic absorption
	Measuring range: low µg/L - mg/L-range	Measuring range: low µg/L - mg/L-range	Measuring range: low µg/L - mg/L-range
Version "Plus"	Optionally available with two amalgamation units for Hg enrichment and elimination of interferences		
Measuring principle	<ul style="list-style-type: none"> ▪ Cold vapour atomic fluorescence spectrometry with excellent sensitivity, selectivity and linearity for Hg-analysis ▪ Hg vapour generation based on cold vapor technique (CV) with SnCl₂ as reducing agent 		
	Detection of the mercury fluorescence radiation at 253,7 nm at 90° angle to the direction of radiation source	Detection of the mercury atomic absorption at 253,7 nm	Detection of the mercury fluorescence radiation at 253,7 nm at 90° angle to the direction of radiation source or atomic absorption at 253,7 nm
Photometer	Atomic fluorescence spectrometer with focussing of the fluorescence radiation to the detector.	Atomic absorption spectrometer with absorption cell	Atomic fluorescence and atomic absorption spectrometer with movable detector, focussing of the fluorescence radiation at 90° to the detector or direct to the absorption cell
Operation Mode	Time-controlled flow injection, without or with autosampler, amalgamation unit as option (Version „Plus“)		

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Detection Limit	<ul style="list-style-type: none"> ▪ $\leq 1\mu\text{g/L}$ (without enrichment) ▪ $\leq 0,1\mu\text{g/L}$ (with enrichment) 	<ul style="list-style-type: none"> ▪ $\leq 5\mu\text{g/L}$ (without enrichment) AAS ▪ $\leq 1\mu\text{g/L}$ (with enrichment) AAS 	<ul style="list-style-type: none"> ▪ $\leq 1\mu\text{g/L}$ (without enrichment) AFS ▪ $\leq 0,1\mu\text{g/L}$ (with enrichment) AFS ▪ $\leq 5\mu\text{g/L}$ (without enrichment) AAS ▪ $\leq 1\mu\text{g/L}$ (with enrichment) AAS
Dynamic measuring range	<ul style="list-style-type: none"> ▪ 5 concentration decades (1ng/L – 100$\mu\text{g/L}$) without electronic sensitivity control ▪ Carry over <0,5% relative 		<ul style="list-style-type: none"> ▪ 5 concentration decades (1ng/L – 100$\mu\text{g/L}$) without electronic sensitivity control
Sample consumption	Approximately 1mL/measurement		
Safety functions	Controlled cleaning function in case of excess concentrations		
Software	WinAAS [®]		
Dimensions (W x H x D)	600 mm x 350 mm x 490 mm (without PC)		
Weight	37 kg (without PC)		