

List of instruments at Villum Research Station (September 14, 2016)

Parameter measured	Name of monitor	No.	Price (DDK)	Date
Ozone				
O ₃ (ranges: 0-100 ppb to 0-10 ppm)	Model T400 UV absorption analyzer	1	109,000	04.06.2014
O ₃	O3 Monitor 8420 (API)	1	100,000	2006
O ₃	O3 Monitor 8423 (API)	1	100,000	2006
NO/NO₂/NO_x				
NO/NO ₂ /NO _x (ranges: 0-5 ppb to 0-2,000 ppb)	Model T200U	2	106,276	04.06.2014
NO ₂ (ranges: 0-5 ppb to 0-1,000 ppb)	Model T500U	2	109,725	04.06.2014
CO				
CO (ranges: 0-100 ppb to 0-100 ppm)	Model T300 U	3	83,704	04.06.2014
CO₂ and Methane				
CO ₂ and Methane	Picaro slow	1	500,000	2011
CO ₂ and Methane	Picaro fast	1	500,000	2014
Mercury				
Hg	2505 Mercury Calibration unit	1	43,280	04.06.2014
Total gaseous Hg	Model 2537X Analyzer	3	235,233	04.06.2014
Gaseous oxidized Hg	Tekran Model 1130	2	258,432	04.06.2014
Particulate Hg	Tekran Model 1135	2	120,669	04.06.2014
Particulates				
Particle number distribution	Mobility Particle Sizer (SMPS)	1	387,000	July 2009
Dust	Environmental Dust monitor	1	124,000	Dec. 2014
Cloud Condensation Nucleus	Cloud Condensation Nucleus (CCN) counter	1	534,000	Sep. 2015
Black carbon	MAAP	1	144,410	July 2010
Hygroscopicity of particles	Hygroscopicity Tandem Differential Mobility Analyzer (HTDMA)	1	1,112,000	Ordered
Particle composition and Soot	SP-TOF-AMS	1	3,547,375	02.05.2014
Particle composition	ACSM	1	1,602,250	02.05.2014
Particles	Nephelometer S/N5	1	191,000	Sep. 2015
POP, OC-EC.....	HVS	2	600,000	01.01.2014 01.06.2015
HM, SO ₄ ²⁻ , NO ₃ ⁻ , NH ₄ ⁺ , SO ₂	Filter pack	1+1	350,000*	1990 Ordered*
Zero air generator				
SO ₂ , H ₂ S, NO, NO ₂ , O ₃ , CO, HC	Model T701H High Performance zero air system	1	48,622	04.06.2014
organics				
VOCs	PTR-TOF-MS 8000	1	2,500,000	1.5.2014
VOCs	PTR-TOF-MS 1000	1	1,500,000	1.5.2014

Other atmospheric instruments				
Cloud height	Vaisala ceilometer		500.000	1.2.2012
BrO, IO	MAX DOAS	2	1,050,000	Ordered
Meteorological data	Mast with: Pyranometer, thermometer, wind speed, wind direction, relative humidity, precipitation, heat flux	1		
Laboratory equipment				
	Microscope	1		1.5.2014
	Stereo microscope	1		1.5.2014
From grams down to μg	balances	3		1.5.2014
	centrifuge	1		1.5.2014
	Shaking table	1		1.5.2014
	thermometers	2		1.5.2014
	Vacuum pump	1		1.5.2014
	Magnetic stirrer	1		1.5.2014
	UV-Visible spectrophotometer	1		1.5.2014
	Flow bench	1		1.5.2014
	Fume cupboard	2		1.5.2014
Deionized water $<1 \mu\text{S}$	Deionisation system	2		1.5.2014
	Desiccator	1		1.5.2015
	Heating cabinet	1		1.5.2015
	Most basic glassware			1.5.2015
	Special laboratory washer	1		1.5.2015
	incubator	1		1.5.2015
	-80°C freezer	1		1.5.2015
	-20°C freezer	1		1.5.2015
	refrigerator	1		1.5.2015