

Port 502
ID Modbus 50

#	Name	Start address		Notes	Notes2	Notes3
Coil registers for reading by a master						
1	Status of spectrometer	0		1 – OK 0 – Faults OK – data transfer, light intensity and flow rate are in acceptable ranges.		
2	Status of thermocontrollers	1		1 – OK 0 – Faults OK – all thermocontrollers keep temperature in their preset ranges		
3	Availability for external request	2		1 - Ready Not ready	0	
4	Status of Zero test	3		1 – Zero test is going 0 – Procedures differed from Zero test		
5	Status of calibration	4		1 – Calibration is going 0 – Procedures differed from Calibration		
Float registers for reading by a master						
		LSW	MSW			
6	Elemental mercury	24	25	ug/m3		
7	Total mercury	10	11	ug/m3		
8	Oxidized mercury	12	13	ug/m3		
9	Monitor flow	14	15	L/min		
10	Vacuum	16	17	psi		
11	Dilution pressure	18	19	psi, sensor not connected		
12	Bypass pressure	20	21	psi, sensor not connected, reserved		
13	Temperature of spectrometer	22	23	*C		
14	Code of a current mode	8	9	Start Level Cell Delay Cell Level Zero Delay Zero Test Total Mercury Delay Total Mercury Elemental Mercury Delay Elemental Mercury Pre-Calibration Delay Calibration Post-Calibration Delay Purge	5 7 8 11 12 21 22 26 27 31 32 33 13	
15	Errors and warnings	28	29		decimal	binary
				all OK	0	00000000
				ERROR: NO DATA	1	00000001
				ERROR: LOW LIGHT	2	00000010
				WARNING: LOW FLOW	4	00000100
				WARNING: CONVERTER	8	00001000
				WARNING: WATLOW1	16	00010000
				WARNING: WATLOW2 32 (00100000)	32	00100000
				WARNING: WATLOW3 64 (01000000)	64	01000000
				WARNING: WATLOW4 128 (10000000)	128	10000000
				Possible to have several warnings simultaneously, e.g. 24 (00011000) means WARNING: CONVERTER and WARNING: WATLOW1		
16	Calibration coefficient	30	31	Total mercury coefficient		
Coil registers for writing by a master						
17	Run calibration	99		Request to start calibration. Delay will be in the range 1 – 20 minutes since it can be started only when total mercury is determined.		
18	Run zero test	100		Request to start a zero test. Delay will be in the range 1 – 20 minutes since it can be started only when total mercury is determined.		
19	Run elemental	101		Request to start measurement of elemental mercury. Delay will be in the range 1 – 20 minutes since it can be started only when total mercury is determined.		
20	Start Purge	102		Request to start purge.		
21	End Purge	103		Request to end purge.		

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