

# Modbus Register 5500AMC Ammonia Monochloramine Analyzer

V1.1

## 5500AMC Ammonia Monochloramine Analyzer V1.1

Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
NH4-Channel 1	40001	Float	2	R			NH4 Measurement Sample Stream channel 1
NH2CL-N-Channel 1	40003	Float	2	R			NH2CL-N Measurement Sample Stream channel 1
NH2CL-CL2-Channel 1	40005	Float	2	R			NH2CL-CL2 Measurement Sample Stream channel 1
Free NH4-N-Channel 1	40007	Float	2	R		0 /2200	Free NH4-N Measurement Sample Stream channel 1
Ratio-Channel 1	40009	Float	2	R		0 /99999	Ratio Measurement Sample Stream channel 1
NH4-Channel 2	40011	Float	2	R			NH4 Measurement Sample Stream channel 2
NH2CL-N-Channel 2	40013	Float	2	R			NH2CL-N Measurement Sample Stream channel 2
NH2CL-CL2-Channel 2	40015	Float	2	R			NH2CL-CL2 Measurement Sample Stream channel 2
Free NH4-N-Channel 2	40017	Float	2	R		0 /2200	Free NH4-N Measurement Sample Stream channel 2
Ratio-Channel 2	40019	Float	2	R		0 /99999	Ratio Measurement Sample Stream channel 2
CALCULATION	40021	Float	2	R		-999999999 /999999999	The calculated value
Data Log Interval	40023	Unsigned Integer	1	R/W	0 /1 /2 /3 /4 /5 /6 /7		Data log interval
FUNCTION CODE	40024	Unsigned Integer	1	R/W		0 /65535	
NEXT STATE	40025	Unsigned Integer	1	R		0 /65535	
Location String	40026	String	8	R/W			User editable string for naming the analyzer
Serial Number	40034	String	6	R			Serial number for the analyzer
EventInteger	40040	Unsigned Integer	1	R		0 /65535	
LastCalDate	40041	Time2	2	R			
NextCalDate	40043	Time2	2	R			
NextCalTime	40045	Time2	2	R			
LastCalTime	40047	Time2	2	R			
CalSlope	40049	Float	2	R/W		0.5 /1.5	
CalSlope	40051	Float	2	R/W		0.5 /1.5	
CalZero	40053	Float	2	R/W		-999.999 /999.999	
CalZero2	40055	Float	2	R/W		-999.999 /999.999	
CalStdValue	40057	Float	2	R/W			
MeasUnits	40059	Unsigned Integer	1	R/W	U2 /38 /0 /39		
LastMeasTime	40060	Time2	2	R			
NextMeasTime	40062	Time2	2	R			
ABSORBANCE	40064	Float	2	R		0 /9.9999	
CONCENTRATION	40066	Float	2	R			
DARK COUNTS	40068	Integer	2	R		0 /99999999	
DARK STD DEV	40070	Unsigned Integer	1	R		0 /65535	
REF COUNTS	40071	Integer	2	R		0 /99999999	
REF STD DEV	40073	Unsigned Integer	1	R		0 /65535	
SAMPLE COUNTS	40074	Integer	2	R		0 /99999999	
SAMPLE STD DEV	40076	Unsigned Integer	1	R		0 /65535	
ABSORBANCE2	40077	Float	2	R		0 /9.9999	
CONCENTRATION2	40079	Float	2	R			

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Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
DARK COUNTS2	40081	Integer	2	R		0 /99999999	
DARK STD DEV2	40083	Unsigned Integer	1	R		0 /65535	
REF COUNTS2	40084	Integer	2	R		0 /99999999	
REF STD DEV2	40086	Unsigned Integer	1	R		0 /65535	
SAMPLE COUNTS2	40087	Integer	2	R		0 /99999999	
SAMPLE STD DEV2	40089	Unsigned Integer	1	R		0 /65535	
CHANNEL	40090	Unsigned Integer	1	R		0 /65535	
CurMeasChannel	40091	Unsigned Integer	1	R		0 /65535	
CycleType	40092	Unsigned Integer	1	R/W	0 /1		
CycleInterval	40093	Unsigned Integer	1	R/W		5 /240	
CCI2Type	40094	Unsigned Integer	1	R/W	0 /1		
AutoCalEnable	40095	Unsigned Integer	1	R/W	0 /1		
AutoCalBase	40096	Unsigned Integer	1	R/W	0 /1		
AutoCalWeekDays	40097	Unsigned Integer	1	R/W		0 /65535	
AutoCalTime	40098	Time2	2	R/W			
AutoCalInterval	40100	Unsigned Integer	1	R/W		2 /255	
AutoCleanEnable	40101	Unsigned Integer	1	R/W	0 /1		
AutoCleanBase	40102	Unsigned Integer	1	R/W	0 /1		
AutoCleanWeekDays	40103	Unsigned Integer	1	R/W		0 /65535	
AutoCleanTime	40104	Time2	2	R/W			
AutoCleanInterval	40106	Unsigned Integer	1	R/W		2 /255	
SampleChannels	40107	Unsigned Integer	1	R/W		0 /65535	
Sample Stream 1 Name	40108	String	6	R			User editable string for naming sample stream 1
Sample Stream 2 Name	40114	String	6	R			User editable string for naming sample stream 2
Sample Stream 6 Name	40120	String	6	R			User editable string for naming sample stream 6
SeqNum1	40126	Unsigned Integer	1	R	0 /1 /2 /3 /4 /5 /6 /7 /8 /9 /10 /11		
SeqNum2	40127	Unsigned Integer	1	R	0 /1 /2 /3 /4 /5 /6 /7 /8 /9 /10 /11		
SeqNum3	40128	Unsigned Integer	1	R	0 /1 /2 /3 /4 /5 /6 /7 /8 /9 /10 /11		
SeqNum4	40129	Unsigned Integer	1	R	0 /1 /2 /3 /4 /5 /6 /7 /8 /9 /10 /11		
Sequence1	40130	Unsigned Integer	1	R		0 /0	
Sequence2	40131	Unsigned Integer	1	R		0 /0	

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Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
Sequence3	40132	Unsigned Integer	1	R		0 /0	
Sequence4	40133	Unsigned Integer	1	R		0 /0	
SeqHiddenTag	40134	Unsigned Integer	1	R		0 /65535	
SeqHighlightTag	40135	Unsigned Integer	1	R		0 /65535	
Service1Date	40136	Time2	2	R			
Service1Time	40136	Time2	2	R			
Service2Date	40138	Time2	2	R			
Service2Time	40138	Time2	2	R			
Service3Date	40140	Time2	2	R			
Service3Time	40140	Time2	2	R			
Service4Date	40142	Time2	2	R			
Service4Time	40142	Time2	2	R			
Service5Date	40144	Time2	2	R			
Service5Time	40144	Time2	2	R			
Service6Date	40146	Time2	2	R			
Service6Time	40146	Time2	2	R			
Service7Date	40148	Time2	2	R			
Service7Time	40148	Time2	2	R			
Service8Date	40150	Time2	2	R			
Service8Time	40150	Time2	2	R			
Service9Date	40152	Time2	2	R			
Service9Time	40152	Time2	2	R			
ServiceHiddenTag	40154	Unsigned Integer	1	R		0 /65535	
ServiceHighlightTag	40155	Unsigned Integer	1	R		0 /65535	
ColorimerTemp	40156	Float	2	R		-20 /100	
ColorimerTemp2	40158	Float	2	R		-20 /100	
ScriptType	40160	Unsigned Integer	1	R	0 /1 /2 /3 /4 /5 /6 /7 /255		
ScriptType2	40161	Unsigned Integer	1	R	0 /1 /2 /3 /4 /5 /6 /7 /255		
NumChannels	40162	Unsigned Integer	1	R/W	1 /2		
SOFTWARE VERS	40163	Float	2	R		0 /100.0	
DD FIRMWARE	40165	Unsigned Integer	1	R		0 /1000	
DD CONTENT	40166	Unsigned Integer	1	R		0 /1000	
BOOTLOADER VERS	40167	Float	2	R		0 /9.99	
SCRIPT VERSION	40169	Unsigned Integer	1	R		0 /100	
SCRIPT CONTENT	40170	Unsigned Integer	1	R		0 /100	
I2CVersion	40171	String	1	R			
AnalyzerType	40172	Unsigned Integer	1	R/W	0 /1 /2 /3 /4 /5 /9		
Last Cal Abs	40173	Float	2	R		0 /9.9999	
Last Cal Abs	40175	Float	2	R		0 /9.9999	

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Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
Last Cal Abs	40177	Float	2	R		0 /9.9999	
Last Cal Abs	40179	Float	2	R		0 /9.9999	
Last Cal Conc	40181	Float	2	R		0 /9999.99	
Last Cal Conc	40183	Float	2	R		-99.99 /99.99	
Last Cal Conc	40185	Float	2	R		0 /9999.99	
Last Cal Conc	40187	Float	2	R		-99.99 /99.99	
ReminderDisable	40189	Unsigned Integer	2	R/W		0 /4294967295	To disable the alerts
AutoStart	40191	Unsigned Integer	1	R/W	0 /1		
EditSmp1String	40192	String	5	R/W			
EditSmp2String	40197	String	5	R/W			
SignalAverage	40202	Unsigned Integer	1	R/W		1 /5	The signal average
ActivateChannels	40203	Unsigned Integer	1	R/W		0 /65535	
AirPumpPressure	40204	Float	2	R		0 /9.99	
Reagent1Level	40206	Unsigned Integer	1	R		0 /100	
Reagent2Level	40207	Unsigned Integer	1	R		0 /100	
Reagent3Level	40208	Unsigned Integer	1	R		0 /100	
Standard1Level	40209	Unsigned Integer	1	R		0 /100	
Standard2Level	40210	Unsigned Integer	1	R		0 /100	
CleaningLevel	40211	Unsigned Integer	1	R		0 /100	
Reagent1Days	40212	Unsigned Integer	1	R		0 /65535	The days remaining for reagent 1
Reagent2Days	40213	Unsigned Integer	1	R		0 /65535	The days remaining for reagent 2
Reagent3Days	40214	Unsigned Integer	1	R		0 /65535	The days remaining for reagent 3
ReagentTemp	40215	Float	2	R		-20.0 /100.0	
Reagent1DelTime	40217	Unsigned Integer	1	R		0 /65535	The reagent delivery time in mS.
Reagent1DelTime2	40218	Unsigned Integer	1	R		0 /65535	The reagent delivery time in mS.
Reagent2DelTime	40219	Unsigned Integer	1	R		0 /65535	The reagent delivery time in mS.
Reagent2DelTime2	40220	Unsigned Integer	1	R		0 /65535	The reagent delivery time in mS.
Reagent3DelTime	40221	Unsigned Integer	1	R		0 /65535	The reagent delivery time in mS.
Reagent3DelTime2	40222	Unsigned Integer	1	R		0 /65535	The reagent delivery time in mS.
LED LEVEL	40223	Unsigned Integer	1	R/W		0 /65535	
AmbientTemp	40224	Float	2	R		-20 /100	The ambient temperature
FanSpeed	40226	Unsigned Integer	1	R		0 /65535	The fan speed
FirmwareSourceError	40227	Unsigned Integer	1	R		0 /65535	The source for firmware error

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Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
AnalyzerStopType	40228	Unsigned Integer	1	R/W	0 /1		To select the analyzer stop type
PowerSourceVoltage	40229	Unsigned Integer	1	R	0 /1		The power source voltage
PowerSourceFrequency	40230	Unsigned Integer	1	R		0 /65535	The power source frequency
LowerDoorOpen	40231	Unsigned Integer	1	R		0 /1	The lower door open state
MeasMinValue	40232	Float	2	R		0 /9999.9	The minimum measurement value
MeasMaxValue	40234	Float	2	R		0 /9999.9	The maximum measurement value
MeasMinValue2	40236	Float	2	R		0 /9999.9	The minimum measurement value
MeasMaxValue2	40238	Float	2	R		0 /9999.9	The maximum measurement value
MeasParam	40240	Unsigned Integer	1	R	P42 /100		The measurement parameter
MeasParam2	40241	Unsigned Integer	1	R	P42 /100		The measurement parameter
ScriptFileType	40242	Unsigned Integer	1	R/W	0 /1		To select the analyzer script file type
LeakCounts	40243	Unsigned Integer	1	R		0 /65535	The counts form leak sensor
SamplePressure	40244	Float	2	R		0 /99.99	
Sample1Pressure	40246	Float	2	R		0 /99.99	
Sample2Pressure	40248	Float	2	R		0 /99.99	
SampleFlow	40250	Unsigned Integer	1	R		0 /10000	
Sample1Flow	40251	Unsigned Integer	1	R		0 /5000	
Sample2Flow	40252	Unsigned Integer	1	R		0 /5000	
SamplePressure2	40253	Float	2	R		0 /99.99	
ErrorCode1	40255	Integer	1	R		0 /32767	
ErrorCode2	40256	Integer	1	R		0 /32767	
HeaterDutyCycle	40257	Unsigned Integer	1	R		0 /100	
HeaterDutyCycle2	40258	Unsigned Integer	1	R		0 /100	
FluidLevel	40259	Unsigned Integer	1	R/W		0 /100	
ServiceItem	40260	Unsigned Integer	1	R/W	0 /1 /2 /3 /4 /5 /6 /7 /8 /9 /10 /11 /12 /13 /14 /15 /16 /17 /18 /19 /20 /21 /22 /23 /24 /25 /26 /27		
LastServiceDate	40261	Time2	2	R			
NextServiceDate	40263	Time2	2	R			
NextServiceDays	40265	Unsigned Integer	1	R		0 /65535	
Link2scJobNum	40266	Unsigned Integer	1	R		0 /65535	The job number for Link2sc
Link2scSampleNum	40267	Unsigned Integer	1	R		0 /65535	The sample number for Link2sc
SoftwareResetData	40276	Unsigned Integer	2	R		0 /4294967295	
Maintenance Stack Left	40278	Unsigned Integer	1	R		0 /65535	Remaining stack size

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Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
System Stack Left	40279	Unsigned Integer	1	R		0 /65535	Remaining stack size
Smart Sensor Stack Left	40280	Unsigned Integer	1	R		0 /65535	Remaining stack size
Scheduler Stack Left	40281	Unsigned Integer	1	R		0 /65535	Remaining stack size
Script Engine Stack Left	40282	Unsigned Integer	1	R		0 /65535	Remaining stack size
Script Engine 2 Stack Left	40283	Unsigned Integer	1	R		0 /65535	Remaining stack size
A2D Measurement Stack Left	40284	Unsigned Integer	1	R		0 /65535	Remaining stack size
Delay Timer Stack Left	40285	Unsigned Integer	1	R		0 /65535	Remaining stack size
Mixer/Heater Stack Left	40286	Unsigned Integer	1	R		0 /65535	Remaining stack size
Reagent Delivery Stack Left	40287	Unsigned Integer	1	R		0 /65535	Remaining stack size
Sample Delivery Stack Left	40288	Unsigned Integer	1	R		0 /65535	Remaining stack size
ProcessStepText	40289	Unsigned Integer	1	R	0 /1 /2 /3 /4 /5 /6 /7 /8 /9 /10 /11 /12 /13 /14 /15 /16 /17 /18 /19 /20 /65535		
ProcessStepText2	40290	Unsigned Integer	1	R	0 /1 /2 /3 /4 /5 /6 /7 /8 /9 /10 /11 /12 /13 /14 /15 /16 /17 /18 /19 /20 /65535		
ProcessCompletion	40291	Unsigned Integer	1	R		0 /100	
ProcessCompletion2	40292	Unsigned Integer	1	R		0 /100	
ProcessStepTime	40293	Unsigned Integer	1	R		0 /65000	
ProcessStepTime2	40294	Unsigned Integer	1	R		0 /65000	
	40295	Unsigned Integer	1	R	0 /1 /2 /3 /4 /5 /6 /7 /8 /9 /10 /11 /12 /13 /14 /15 /16 /17 /18 /19 /20 /65535		
	40296	Unsigned Integer	1	R		0 /100	
	40297	Unsigned Integer	1	R		0 /9999	
	40298	Unsigned Integer	1	R		0 /65535	
	40299	Unsigned Integer	1	R	0 /1 /2 /3 /4 /5 /6 /7 /8 /9 /10 /11 /12 /13 /14 /15 /16 /17 /18 /19 /20 /65535		

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Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
	40300	Unsigned Integer	1	R		0 /100	
	40301	Unsigned Integer	1	R		0 /9999	
	40302	Unsigned Integer	1	R		0 /65535	
CurrentMeasTime1	40303	Time2	2	R			
CurrentMeas2Time1	40305	Time2	2	R			
	40307	Unsigned Integer	1	R	0 /1 /2 /3 /4 /5 /6 /7 /8 /9 /10 /11 /12 /13 /14 /15 /16 /17 /18 /19 /20 /65535		
	40308	Unsigned Integer	1	R		0 /100	
	40309	Unsigned Integer	1	R		0 /9999	
	40310	Unsigned Integer	1	R		0 /65535	
	40311	Unsigned Integer	1	R	0 /1 /2 /3 /4 /5 /6 /7 /8 /9 /10 /11 /12 /13 /14 /15 /16 /17 /18 /19 /20 /65535		
	40312	Unsigned Integer	1	R		0 /100	
	40313	Unsigned Integer	1	R		0 /9999	
	40314	Unsigned Integer	1	R		0 /65535	
CurrentMeasTime1	40315	Time2	2	R			
CurrentMeas2Time1	40317	Time2	2	R			
CalOutputMode	40319	Unsigned Integer	1	R/W	0 /1 /2		
LastCalType	40320	Unsigned Integer	1	R	0 /1 /2		
StartCalType	40321	Unsigned Integer	1	R/W		0 /65535	
STIR BAR RSD	40322	Float	2	R		0 /1000	
STIR BAR RSD2	40324	Float	2	R		0 /1000	
ReagentR4Num	40326	Unsigned Integer	1	R/W	0 /1 /2 /3		
ReagentR3Num	40326	Unsigned Integer	1	R/W	0 /1 /2		



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Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
ReagentR2Num	40326	Unsigned Integer	1	R/W	0 / 1		
ReagentR1Num	40326	Unsigned Integer	1	R/W	0		
StandardS2Num	40326	Unsigned Integer	1	R/W	0 / 1		
StandardS1Num	40326	Unsigned Integer	1	R/W	0		
SampleChannels1	40326	Unsigned Integer	1	R/W	0		
SampleChannels2	40326	Unsigned Integer	1	R/W	0 / 1		
MixerSpeed	40326	Unsigned Integer	1	R/W		1 / 100	
ReagentDeliveryType	40327	Unsigned Integer	1	R/W	0 / 1		
MixerDirection	40327	Unsigned Integer	1	R/W	0 / 1		
CellSelection	40328	Unsigned Integer	1	R/W	0 / 1		
HeaterTemp	40329	Unsigned Integer	1	R/W		20 / 50	
HeaterSetTemp	40329	Unsigned Integer	1	R		20 / 99	
ReagentDeliveryTime	40329	Unsigned Integer	1	R/W		50 / 65000	
	40329	Unsigned Integer	1	R/W		20 / 9999	
EditDeliveryTime	40329	Unsigned Integer	1	R/W		1 / 9999	
AnalyticDevice	40330	Unsigned Integer	1	R	0 / 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 11 / 12 / 13		
AnalyticTestTime	40331	Unsigned Integer	1	R		0 / 9999	
LED0DutyCnts	40332	Integer	2	R		0 / 99999999	
LED25DutyCnts	40334	Integer	2	R		0 / 99999999	
LED50DutyCnts	40336	Integer	2	R		0 / 99999999	
LED0Duty	40338	Unsigned Integer	1	R/W		0 / 100	The 0% LED duty cycle
LEDMidDuty	40339	Unsigned Integer	1	R		0 / 200	The middle LED duty cycle
LEDHighDuty	40340	Unsigned Integer	1	R		0 / 200	The highest LED duty cycle
LED LEVEL2	40341	Unsigned Integer	1	R/W		0 / 65535	
	40342	Float	2	R/W		1 / 9.99	
	40344	Float	2	R/W		0 / 1.0	
	40346	Float	2	R/W		0 / 1.0	

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Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
	40348	Float	2	R/W		5 /99.99	
	40350	Float	2	R/W		5 /99.99	
Reagent4Level	40352	Unsigned Integer	1	R		0 /100	
I2CReadRetry1	40353	Unsigned Integer	1	R		0 /65535	
I2CReadRetry2	40354	Unsigned Integer	1	R		0 /65535	
I2CWriteRetry1	40355	Unsigned Integer	1	R		0 /65535	
I2CWriteRetry2	40356	Unsigned Integer	1	R		0 /65535	
LEDTestTime	40357	Unsigned Integer	1	R		0 /9999	
ServiceType	40358	Unsigned Integer	1	R	0 /1 /2 /3 /4 /5 /6 /7 /8 /9 /10 /11 /12 /13 /14 /15 /16 /17 /18 /19 /20 /21 /22 /23 /24 /25 /26 /27 /28 /29 /30 /31 /32 /33 /34 /35 /36		
ServiceDate	40359	Time2	2	R			
ServiceTime	40359	Time2	2	R			
PrimeReagents	40364	Unsigned Integer	1	R/W		0 /65535	
BasicTestPass	40365	Unsigned Integer	1	R/W		0 /1	
OperationMinutesLeft	40366	Float	2	R		0 /240	The minutes left for current operation
OperationMinutesLeft2	40368	Float	2	R		0 /240	The minutes left for current operation of cell 2
CurSampleChnName	40370	Unsigned Integer	1	R		0 /0	
GrabSampleType	40371	Unsigned Integer	1	R/W	0 /1		The grab sample type
	40372	Float	2	R/W			The standard vale for grab sample in
	40374	Float	2	R		-9999.9 /9999.9	The difference for grab sample measurement
	40376	Float	2	R		-9999.9 /9999.9	The difference for grab sample measurement
	40378	Float	2	R		-200.0 /200.0	The percent difference for gab sample in measurement
	40380	Float	2	R		-200.0 /200.0	The percent difference for gab sample in measurement
GrabSampleTimeDate	40382	Time2	2	R			The time and date for grab sample

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Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
ScreenTitle	40384	Unsigned Integer	1	R	0 /1 /2 /3 /4 /5 /6 /7 /8 /9 /10		The screen title string
MinSampleFlow	40386	Unsigned Integer	1	R		0 /5000	The minimum sample flow required
LogEventSet	40387	Unsigned Integer	1	R		0 /65535	The log event set or clear flag
Test Num	40388	Unsigned Integer	1	R/W		0 /20	
Clear Count	40389	Unsigned Integer	1	R/W		0 /1	
Count	40390	Unsigned Integer	2	R		0 /4294967295	
Max Count	40392	Unsigned Integer	2	R		0 /4294967295	
ServiceHistData	40394	Unsigned Integer	2	R		0 /9999	The service history associated data
ServiceHistData	40394	Unsigned Integer	2	R		0 /99999999	The service history associated data
ServiceHistData	40394	Unsigned Integer	2	R		0 /9999	The service history associated data
ServicePartRunTime	40396	Unsigned Integer	1	R		0 /65000	The service part run time
ServiceValveRunCycle	40397	Unsigned Integer	2	R		0 /99999999	The valve run cycles
	40399	Integer	1	R		0 /9999	The air pump total life time
RTCUpdateData	40400	Integer	2	R		-2147483648 /2147483647	The data - second difference when the RTC time is updated
Reagent4DelTime	40402	Unsigned Integer	1	R		0 /65535	The reagent delivery time in mS.
ServiceHistFluidLevel	40403	Unsigned Integer	1	R		0 /100	
ServiceHistFluid1Level	40404	Unsigned Integer	1	R		0 /100	
ServiceHistFluid2Level	40405	Unsigned Integer	1	R		0 /100	
ServiceHistFluid3Level	40406	Unsigned Integer	1	R		0 /100	
ServiceHistFluid4Level	40407	Unsigned Integer	1	R		0 /100	
LevelSensor	40408	Unsigned Integer	1	R	0 /1		
ColorimeterType	40409	Unsigned Integer	1	R		0 /2	The colorimeter type
Link2scMeasValue	40434	Float	2	R			The measured vale for link2sc grab sample
Link2scMeasValue	40436	Float	2	R			The measured vale for link2sc grab sample
Link2scLabValue	40438	Float	2	R			The lab vale for link2sc grab sample
Link2scLabValue	40440	Float	2	R			The lab vale for link2sc grab sample
Link2scDiffValue	40442	Float	2	R		-9999.9 /9999.9	The difference for link2sc grab sample measurement
Link2scDiffValue	40444	Float	2	R		-9999.9 /9999.9	The difference for link2sc grab sample measurement
Link2scDiffPercent	40446	Float	2	R		-200.0 /200.0	The percent difference for link2sc gab sample in measurement
Link2scDiffPercent	40448	Float	2	R		-200.0 /200.0	The percent difference for link2sc gab sample in measurement

## 5500AMC Ammonia Monochloramine Analyzer V1.1

Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
AirPurge	40450	Unsigned Integer	1	R/W	0 / 1		The air purge mode
UpperDoorState	40451	Unsigned Integer	1	R	0 / 1		The upper door state - 0 - closed, 1 - open
FanFilterDays	40452	Unsigned Integer	1	R/W		0 / 999	The fan filter day threshold
FanSpeedRPM	40453	Unsigned Integer	1	R/W		0 / 65535	The fan speed threshold
CONCENTRATION2	40454	Float	2	R			
ProcessStepText3	40456	Unsigned Integer	1	R	0 / 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 11 / 12 / 13 / 14 / 15 / 16 / 17 / 18 / 19 / 20 / 65535		
ProcessStepTime3	40459	Unsigned Integer	1	R		0 / 65000	
Override Cal Conc	40460	Float	2	R/W		0 / 9999.99	
Override Cal Conc	40462	Float	2	R/W		0 / 9999.99	
CalResult	40464	Unsigned Integer	1	R	0 / 1		
CONCENTRATION2	40465	Float	2	R			
NumChannelsRead	40467	Unsigned Integer	1	R	1 / 2		
LastMeasConcFreeNh4	40468	Float	2	R		0 / 2200	
CalSlopeTemp1	40470	Float	2	R		0.5 / 1.5	
CalSlopeTemp2	40472	Float	2	R		0.5 / 1.5	
CalZeroTemp1	40474	Float	2	R		-999.999 / 999.999	
CalZeroTemp2	40476	Float	2	R		-999.999 / 999.999	
	40478	Unsigned Integer	1	R		0 / 180	
Calculated Value	41001	Float	2	R			A measurement calculated from sensor measurements
Language	41003	Unsigned Integer	1	R/W			Language to be used on the controller (0=English/1
Data Format	41004	Unsigned Integer	1	R/W			Format used for the Data
Error Hold Mode	41005	Unsigned Integer	1	R/W		0 / 5	Hold mode when an error occurs
Location String	41006	String	8	R/W			Location name for the controller
Display Contrast	41014	Unsigned Integer	1	R/W		0 / 100	Display contrast setting (0-100)
Calculation Log Mode	41015	Unsigned Integer	1	R/W		0 / 3	Calculated measurement logging mode (0=Snapshot
Calculation Log Interval	41016	Unsigned Integer	1	R/W		0 / 7	Calculated measurement logging mode (0=5sec
Variable X Device Selection	41017	Unsigned Integer	1	R/W		0 / 1	Device selection to be used for the X variable in the calculations (0=Device 1
Variable Y Device Selection	41018	Unsigned Integer	1	R/W		0 / 1	Device selection to be used for the Y variable in the calculations (0=Device 1

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Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
Variable X Measurement Selection	41019	Unsigned Integer	1	R/W		0 /15	Measurement selection to be used for the X variable in the calculations
Variable Y Measurement Selection	41020	Unsigned Integer	1	R/W		0 /16	Measurement selection to be used for the Y variable in the calculations
Math Formula	41021	Unsigned Integer	1	R/W		0 /16	Selection of the math formula used in the calculation
Units	41022	String	3	R/W			Units for the calculated value
Display Format	41025	Unsigned Integer	1	R/W		0 /16	Display format for the calculated value
Parameter	41026	String	3	R/W			Parameter for the calculated value
Auto Range Selection X	41029	Unsigned Integer	1	R/W		0 /15	Selection of which range (of auto range) measurement to use for variable X
Auto Range Selection Y	41030	Unsigned Integer	1	R/W		0 /16	Selection of which range (of auto range) measurement to use for variable Y
Select Output	41033	Unsigned Integer	1	R/W		0 /16	
Source	41034	Unsigned Integer	1	R/W		0 /4	The source to use for this output (none or probe)
Sensor Select	41035	Unsigned Integer	1	R/W		0 /1	The device to use for this output
Measurement Select	41036	Unsigned Integer	1	R/W		0 /15	The measurement within the sensor for this output
Function Select	41037	Unsigned Integer	1	R/W		0 /1	The output type (0=Linear
Transfer Value	41038	Float	2	R/W		0 /25	The output value to be used for the transfer setting
Filter	41040	Unsigned Integer	1	R/W		0 /999	Filter time (sec)
Zero Select	41041	Unsigned Integer	1	R/W		0 /1	Selection of the zero level (0=0mA
Minimum Setting	41042	Float	2	R/W		-999999 /999999	The measurement value for the minimum output
Maximum Setting	41044	Float	2	R/W		-999999 /999999	The measurement value for the maximum output
Knee Value Setting	41046	Float	2	R/W		-999999 /999999	The measurement value for the knee point output
Knee Current Setting	41048	Float	2	R/W		0 /100.0	The current value for the knee point output
50 Percent Setting	41050	Float	2	R/W		.0001 /999999	The measurement value for 50% output
Mode	41052	Unsigned Integer	1	R/W		0 /1	The PID mode (0=Auto
Manual Setting	41053	Float	2	R/W		0 /100.0	The manual setting for the output (0 to 100%)
Setpoint	41055	Float	2	R/W		-999999 /999999	Setpoint for the PID control
Phase	41057	Unsigned Integer	1	R/W		0 /1	PID phase (0=Direct
Proportional Band	41058	Float	2	R/W		-999999 /999999	Proportional Band
Integral Time	41060	Unsigned Integer	1	R/W		0 /9999	Integral Time (0 to 9999 sec)
Derivative Time	41061	Unsigned Integer	1	R/W		0 /9999	Derivative Time (0 to 9999 sec)
Auto Range Selection	41063	Unsigned Integer	1	R/W		0 /16	Selection of which range (of auto range) measurement to use
Select Relay	41064	Unsigned Integer	1	R/W		0 /16	
Source	41065	Unsigned Integer	1	R/W		0 /4	The source to use for this relay (none, RTC, or probe)

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Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
Sensor Select	41066	Unsigned Integer	1	R/W		0 / 1	The device to use for this relay
Measurement Select	41067	Unsigned Integer	1	R/W		0 / 15	The measurement within the sensor for this relay
Function Select	41068	Unsigned Integer	1	R/W		0 / 7	The relay type (0=Alarm
Transfer Value	41069	Unsigned Integer	1	R/W		0 / 1	The relay state to be used for the transfer setting (0=off
High Alarm	41070	Float	2	R/W		-999999 / 999999	The high alarm setting
Low Alarm	41072	Float	2	R/W		-999999 / 999999	The low alarm setting
High Alarm Deadband	41074	Float	2	R/W		-999999 / 999999	The high alarm deadband setting
Low Alarm Deadband	41076	Float	2	R/W		-999999 / 999999	The low alarm deadband setting
On Delay	41078	Unsigned Integer	1	R/W		0 / 999	The alarm on delay time (0 to 999 sec)
Off Delay	41079	Unsigned Integer	1	R/W		0 / 999	The alarm off delay time (0 to 999 sec)
Setpoint	41080	Float	2	R/W		-999999 / 999999	The relay control setpoint
Phase	41082	Unsigned Integer	1	R/W		0 / 1	The controller action (0=direct
Deadband	41083	Float	2	R/W		-999999 / 999999	The controller deadband
Overfeed Timer	41085	Unsigned Integer	1	R/W		0 / 999	The overfeed timer setting (0 to 999 sec)
On Delay	41086	Unsigned Integer	1	R/W		0 / 999	The controller on delay time (0 to 999 sec)
Off Delay	41087	Unsigned Integer	1	R/W		0 / 999	The controller off delay time (0 to 999 sec)
Overfeed Timer Reset	41088	Unsigned Integer	1	R/W		0 / 1	A write resets the overfeed timer
Setpoint	41089	Float	2	R/W		-999999 / 999999	The event setpoint
Phase	41091	Unsigned Integer	1	R/W		0 / 1	The event action (0=direct
Deadband	41092	Float	2	R/W		-999999 / 999999	The controller deadband
Max On Time	41094	Unsigned Integer	1	R/W		0 / 9999	The event control max on time
Min On Time	41095	Unsigned Integer	1	R/W		0 / 9999	The event control min on time
Max Off Time	41096	Unsigned Integer	1	R/W		0 / 9999	The event control max off time
Min Off Time	41097	Unsigned Integer	1	R/W		0 / 9999	The event control min off time
Sensor Hold Type	41098	Unsigned Integer	1	R/W		0 / 0	Selects the sensor hold type (0=None
Sensor Hold Select	41099	Unsigned Integer	1	R/W		0 / 0	Select probes to hold when this relay is on when the Hold Type is set for particular sensor. (0=sensor 1
Hold Mode	41100	Unsigned Integer	1	R/W		0 / 0	Selects the hold mode used (1=hold
Duration	41101	Unsigned Integer	1	R/W		0 / 0	Relay on time
Interval Time	41102	Unsigned Integer	1	R/W		0 / 0	The interval time between triggering the relay on

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Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
Off Delay	41103	Unsigned Integer	1	R/W		0 /0	The alarm off delay time (0 to 999 sec)
Warning Level	41104	Unsigned Integer	2	R/W		0 /4294967295	The warning level that triggers the relay
Range	41106	Unsigned Integer	1	R/W		0 /16	Range selection for auto range tags
Fail Safe Mode	41107	Unsigned Integer	1	R/W		0 /16	Fail Safe Mode (0= off
Start Time	41108	Time2	2	R/W			Start time for the scheduler
Run days	41110	Unsigned Integer	1	R/W		0 /16	Run day selection
Smart Sensor 1 Power	41111	Unsigned Integer	1	R/W		0 /1	Smart Sensor 1 Power State (0=Off
Smart Sensor 2 Power	41112	Unsigned Integer	1	R/W		0 /1	Smart Sensor 2 Power State (0=Off
DM STK LEFT	41113	Unsigned Integer	1	R		0 /65535	Device Manager Stack Entries Left
SCAN1 STK LEFT	41114	Unsigned Integer	1	R		0 /65535	Scan 1 Stack Entries Left
SCAN2 STK LEFT	41115	Unsigned Integer	1	R		0 /65535	Scan 2 Stack Entries Left
SCAN3 STK LEFT	41116	Unsigned Integer	1	R		0 /65535	Scan 3 Stack Entries Left
SCAN4 STK LEFT	41117	Unsigned Integer	1	R		0 /65535	Scan 4 Stack Entries Left
SCAN5 STK LEFT	41118	Unsigned Integer	1	R		0 /65535	Scan 5 Stack Entries Left
MT STK LEFT	41119	Unsigned Integer	1	R		0 /65535	Maintance Stack Entries Left
MB NET STK LFT	41120	Unsigned Integer	1	R		0 /65535	Modbus Net Stack Entries Left
MB AUX STK LFT	41121	Unsigned Integer	1	R		0 /65535	Modbus Aux Stack Entries Left
UI STK LEFT	41122	Unsigned Integer	1	R		0 /65535	UI Stack Entries Left
SYS STK LEFT	41123	Unsigned Integer	1	R		0 /65535	System Stack Entries Left
SD STK LEFT	41124	Unsigned Integer	1	R		0 /65535	SD card Stack Entries Left
Idle time	41125	Unsigned Integer	1	R		0 /65535	Microprocessor idle time (x100)
Clear Stats Count	41126	Unsigned Integer	1	R/W		0 /1	Clear the Modbus port stats count
NetCard Good Msg	41127	Unsigned Integer	2	R		0 /4294967295	Number of good messages on the Network Card port
NetCard Bad Msg	41129	Unsigned Integer	2	R		0 /4294967295	Number of bad messages on the Network Card port
NetCard % Good	41131	Float	2	R		0 /100.0	Percentage of good messages on the Network Card port
Service Port Good Msg	41133	Unsigned Integer	2	R		0 /4294967295	Number of good messages on the Service port
Service Port Bad Msg	41135	Unsigned Integer	2	R		0 /4294967295	Number of bad messages on the Service port
Service Port % Good	41137	Float	2	R		0 /100.0	Percentage of good messages on the Service Port
Port1 Good Msg	41139	Unsigned Integer	2	R		0 /4294967295	Number of good messages on the Sensor port 1
Port1 Bad Msg	41141	Unsigned Integer	2	R		0 /4294967295	Number of bad messages on the Port1

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Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
Port1 % Good	41143	Float	2	R		0 /100.0	Percentage of good messages on the Port1
Port2 Good Msg	41145	Unsigned Integer	2	R		0 /4294967295	Number of good messages on the Sensor port 2
Port2 Bad Msg	41147	Unsigned Integer	2	R		0 /4294967295	Number of bad messages on the Port2
Port2 % Good	41149	Float	2	R		0 /100.0	Percentage of good messages on the Port2
Port3 Good Msg	41151	Unsigned Integer	2	R		0 /4294967295	Number of good messages on the Sensor port 3
Port3 Bad Msg	41153	Unsigned Integer	2	R		0 /4294967295	Number of bad messages on the Port3
Port3 % Good	41155	Float	2	R		0 /100.0	Percentage of good messages on the Port3
Port4 Good Msg	41157	Unsigned Integer	2	R		0 /4294967295	Number of good messages on the Sensor port 4
Port4 Bad Msg	41159	Unsigned Integer	2	R		0 /4294967295	Number of bad messages on the Port4
Port4 % Good	41161	Float	2	R		0 /100.0	Percentage of good messages on the Port4
Output 1 Cal Count - 4 mA	41163	Unsigned Integer	1	R/W		0 /25000	Calibration count for output 1 - 4mA value
Output 1 Cal Count - 20 mA	41164	Unsigned Integer	1	R/W		35000 /65533	Calibration count for output 1 - 20mA value
Output 2 Cal Count - 4 mA	41165	Unsigned Integer	1	R/W		0 /25000	Calibration count for output 2 - 4mA value
Output 2 Cal Count - 20 mA	41166	Unsigned Integer	1	R/W		35000 /65533	Calibration count for output 2 - 20mA value
Clear Event Log	41167	Unsigned Integer	1	R/W		1 /4	Clears one of the device event logs (1=Sensor1
Clear Data Log	41168	Unsigned Integer	1	R/W		1 /4	Clears one of the device data logs (1=Sensor1
Output 1 Test Enable	41169	Unsigned Integer	1	R/W		0 /1	Enable Output 1 Test mode (0=Disabled
Output 1 Value	41170	Float	2	R/W		0 /25.0	Output 1 Value
Output 2 Test Enable	41172	Unsigned Integer	1	R/W		0 /1	Enable Output 2 Test mode (0=Disabled
Output 2 Value	41173	Float	2	R/W		0 /25.0	Output 2 Value
Relay 1 Test Enable	41175	Unsigned Integer	1	R/W		0 /1	Enable Relay 1 Test mode (0=Disabled
Relay 1 Value	41176	Unsigned Integer	1	R/W		0 /1	Relay 1 Value
Relay 2 Test Enable	41177	Unsigned Integer	1	R/W		0 /1	Enable Relay 2 Test mode (0=Disabled
Relay 2 Value	41178	Unsigned Integer	1	R/W		0 /1	Relay 2 Value
Relay 3 Test Enable	41179	Unsigned Integer	1	R/W		0 /1	Enable Relay 3 Test mode (0=Disabled
Relay 3 Value	41180	Unsigned Integer	1	R/W		0 /1	Relay 3 Value
Relay 4 Test Enable	41181	Unsigned Integer	1	R/W		0 /1	Enable Relay 4 Test mode (0=Disabled
Relay 4 Value	41182	Unsigned Integer	1	R/W		0 /1	Relay 4 Value
Keyboard Test	41183	Unsigned Integer	1	R/W		0 /65535	Enter key stroke or see last key entry
Internal Temperature	41184	Float	2	R		-60.0 /190.0	Internal temperature of the unit
12V Supply	41186	Float	2	R		0 /15.0	Current 12V supply measurement
3.3V CURRENT	41188	Float	2	R		0 /1.0	Total 3.3V Supply current (A)
12V CURRENT	41190	Float	2	R		0 /2.51	Total 12V Supply current (A)



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Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
SMART SENSOR 1 CUR	41192	Float	2	R		0 /2.5	Smart Sensor 1 - 12V Supply current (A)
SMART SENSOR 2 CUR	41194	Float	2	R		0 /2.5	Smart Sensor 2 - 12V Supply current (A)
ANALOG SENSOR 1 CUR	41196	Float	2	R		0 /0.25	Analog Sensor 1 - 12V Supply current (A)
ANALOG SENSOR 2 CUR	41198	Float	2	R		0 /0.25	Analog Sensor 2 - 12V Supply current (A)
PID 1 Prop Component	41200	Float	2	R		0 /0	The proportional component of PID1 output
PID 1 Intg Component	41202	Float	2	R		0 /0	The intg component of PID1 output
PID 1 Derv Component	41204	Float	2	R		0 /0	The derv component of PID1 output
PID 1 Total	41206	Float	2	R		0 /0	The total of all component of PID1 output
Max Temperature	41208	Float	2	R		-60.0 /190.0	Daily max temperature
Min Temperature	41210	Float	2	R		-60.0 /190.0	Daily min temperature
Network Error	41227	Unsigned Integer	1	R		0 /65535	Error word for the network (bit0 = Sensor1 communications error)
Network Status	41228	Unsigned Integer	1	R		0 /65535	Status word for the network (bit0 = Sensor1 connected)
Sd Board Status	41229	Unsigned Integer	1	R		0 /65535	
12V Gound	41232	Float	2	R		0 /2.50	Current 12V ground measurement
Set Defaults	41237	Unsigned Integer	1	R/W		0 /1	Sets the configurations settings to default conditions
Slot 0 Mapping	41238	Unsigned Integer	1	R		0 /65535	Bit field mapping of relay and analog output mapping of the sensor installed in slot 0
Slot 0 Mapping	41239	Unsigned Integer	1	R		0 /65535	Bit field mapping of relay and analog output mapping of the sensor installed in slot 0
Telegram Configuration Mode	41240	Unsigned Integer	1	R/W		0 /1	Sets the Profibus Telegram configuration to Auto Mode (0) or Manual Mode (1)
DisplayUpdateState	41242	Unsigned Integer	1	R		0 /65535	The display update state of sdrum code update
MeasQualityIndicator	41243	Unsigned Integer	1	R		0 /200	The measurement quality
ServiceDaysIndicator	41244	Unsigned Integer	1	R		0 /9999	The service due days
Output 3 Cal Count - 4 mA	41245	Unsigned Integer	1	R/W		0 /25000	Calibration count for output 3 - 4mA value
Output 3 Cal Count - 20 mA	41246	Unsigned Integer	1	R/W		35000 /65533	Calibration count for output 3 - 20mA value
Output 4 Cal Count - 4 mA	41247	Unsigned Integer	1	R/W		0 /25000	Calibration count for output 4 - 4mA value
Output 4 Cal Count - 20 mA	41248	Unsigned Integer	1	R/W		35000 /65533	Calibration count for output 4 - 20mA value
Output 3 Test Enable	41249	Unsigned Integer	1	R/W		0 /1	Enable Output 3 Test mode (0=Disabled)
OUTPUT 3 VALUE	41250	Float	2	R/W		0 /25.0	Output 3 Value
Output 4 Test Enable	41252	Unsigned Integer	1	R/W		0 /1	Enable Output 4 Test mode (0=Disabled)
Output 4 Value	41253	Float	2	R/W		0 /25.0	Output 4 Value

## ALL Sensors and Analyzer: Classified ERROR Word - Register 49930

**Table 2 Error register**

Bit	Error	Description
0	Calibration error	Faulty calibration detected
1	Electronic settings error	Faulty electronic calibration/settings
2	Cleaning error	Error in cleaning cycle detected
3	Measuring module error	Error in measuring module detected
4	System initialization	Inconsistent settings detected, reset to factory settings
5	Hardware error	Faulty hardware detected
6	Internal communication error	Internal communication error detected
7	Humidity error	Excessive humidity detected
8	Excessive temperature	Excessive temperature detected
9		
10	Sample feed warning	Error in sample feed detected
11	Questionable calibration warning	Accuracy of previous calibration inadequate
12	Questionable measurement warning	Accuracy of previous measurement inadequate/out of range
13	Safety warning	Safety equipment error detected
14	Reagent warning	Reagent warning, e.g. fill level < min detected
15	Service request warning	Service request detected

## ALL Sensors and Analyzer: Classified STATUS Word - Register 49931

**Table 3 Status register**

Bit	Status 1	Description
0	Calibration activated	Calibration in progress, measurement value not up to date
1	Cleaning activated	Cleaning in progress, measurement value not up to date
2	Service mode activated	Device in "Service" mode, measurement value not up to date
3	General error message	General error detected, refer to error text for details
4	Measurement value channel 0, poor quality	Measurement accuracy is not within specified limits
5	Measurement value channel 0, range short-fall	Measurement value falls short of the specified range
6	Measurement value channel 0, range exceeded	Measurement value exceeds the specified range
7	Measurement value channel 1, poor quality	Measurement accuracy is not within specified limits
8	Measurement value channel 1, range short-fall	Measurement value falls short of the specified range
9	Measurement value channel 1, range exceeded	Measurement value exceeds the specified range
10	Measurement value channel 2, poor quality	Measurement accuracy is not within specified limits
11	Measurement value channel 2, range short-fall	Measurement value falls short of the specified range
12	Measurement value channel 2, range exceeded	Measurement value exceeds the specified range
13	Measurement value channel 3, poor quality	Measurement accuracy is not within specified limits
14	Measurement value channel 3, range short-fall	Measurement value falls short of the specified range
15	Measurement value channel 3, range exceeded	Measurement value exceeds the specified range