Modbus Register
sc4500 Modbus TCP/IP

V 1.10

HACH®

Be Right™

sc4500 Modbus TCP/IP V 1.10

Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
Baud rate	40001	Unsigned Integer	1	R/W			0/1/2/3/4
Modbus Mode	40002	Unsigned Integer	1	R/W			0/1
Data Order	40003	Unsigned Integer	1	R/W			0/1
Parity	40004	Unsigned Integer	1	R/W			2/0/1
Stop bits	40005	Unsigned Integer	1	R/W			1/2
Network Card Address	40006	Unsigned Integer	1	R/W			
Modbus Card Name	40007	String	8	R/W			
READ TIMEOUT	40015	Unsigned Integer	1	R/W	s		
REG WRITE TMO	40016	Unsigned Integer	1	R/W	s		
FILE WRITE TMO	40017	Unsigned Integer	1	R/W	s		
FILE PREP TMO	40018	Unsigned Integer	1	R/W	s		
Device Address	40019	Unsigned Integer	1	R/W			
Select Device	40020	Unsigned Integer	1	R/W			
FUNCTION CODE	40021	Unsigned Integer	1	R/W			
NEXT STATE	40022	Unsigned Integer	1	R			
INT BAUD RATE	40023	Unsigned Integer	1	R			0/1/2/3/4
INT NET ADDR	40024	Unsigned Integer	1	R			
Clear Stats Count	40025	Unsigned Integer	1	R/W			
Modbus Good Msg	40026	Unsigned Integer	2	R			
Modbus Bad Msg	40028	Unsigned Integer	2	R			
Internal Modbus Good Msg	40030	Unsigned Integer	2	R			
Internal Modbus Bad Msg	40032	Unsigned Integer	2	R			
MMBS State	40120	Unsigned Integer	1	R			
DM STK LEFT	40121	Unsigned Integer	1	R			
PORT STK LEFT	40122	Unsigned Integer	1	R			
MB INT STK LEFT	40123	Unsigned Integer	1	R			
MB EXT STK LEFT	40124	Unsigned Integer	1	R			
SYS STK LEFT	40125	Unsigned Integer	1	R			
Set Defaults	40126	Unsigned Integer	1	R/W			

Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
Idle time	40127	Unsigned Integer	1	R			

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