Modbus Register
3798-S sc V2

V2.04

HACH®

Be Right™

3798-S sc V2 V2.04

Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
Measurement mS/cm	40001	Float	2	R			Conductivity in mS/cm
Measurement Ohm.cm	40003	Float	2	R			Resistivity Ohm.cm
Measurement temperature	40005	Float	2	R			Temperature
Measurement Scm	40007	Float	2	R			Conductivity in S/cm
Measurement uScm	40009	Float	2	R			Conductivity in uS/cm
Measurement S/m	40011	Float	2	R			Conductivity in S/m
Measurement mS/m	40013	Float	2	R			Conductivity in mS/m
Measurement KOhm.cm	40015	Float	2	R			Resistivity KOhm.cm
Measurement Ohm.m	40017	Float	2	R			Resistivity Ohm.m
Measurement Ohm.m (2)	40019	Float	2	R			Resistivity Ohm.m2
AutoRange S/cm	40021	Unsigned Integer	1	R			Auto Ranging redirection
AutoRange S/m	40022	Unsigned Integer	1	R			Auto Ranging redirection of Sm
AutoRange Ohm.cm	40023	Unsigned Integer	1	R			Auto Ranging redirection of Ohm.cm
AutoRange Ohm.m	40024	Unsigned Integer	1	R			Auto Ranging of Ohm.m
measurement raw temperature	40025	Float	2	R			Raw Temperature
Conductivity unit	40027	Unsigned Integer	1	R/W			Conductivity unit
Temperature unit	40028	Unsigned Integer	1	R/W			Temperature unit
Output Mode	40029	Unsigned Integer	1	R/W			OutputMode
SensorName	40030	String	6	R/W			SensorName
Software Version (float)	40036	Float	2	R			Software version
Driver Version (float)	40038	Float	2	R			Driver version
Mains Frequency 50Hz	40040	Unsigned Integer	1	R/W			Main Frequency
Function code	40041	Unsigned Integer	1	R/W			Function Code
Next state	40042	Unsigned Integer	1	R			Next Step
Password	40043	Unsigned Integer	1	R/W			Password
Serial number[1]	40044	Unsigned Integer	1	R/W			Serial number[0]
Serial number[2]	40045	Unsigned Integer	1	R/W			Serial number[1]
Serial number[3]	40046	Unsigned Integer	1	R/W			Serial number[2]
Conductivity parameter	40047	Unsigned Integer	1	R/W			&CMD_kunit
Temperature unit	40048	Unsigned Integer	1	R/W			&CMD_tunit
Offset correction	40049	Float	2	R			Resistivity Offset
Electrical Calibration Resistance	40051	Float	2	R/W			Resistivity Adjust vaue
Electrical Slope	40053	Float	2	R			Electrical slope
Process Slope	40055	Float	2	R/W			Process slope

HACH®
Be Right™

3798-S sc V2 V2.04

Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
Main Calibration Adjust Value	40057	Float	2	R/W			Cal Conductivity Adjust Value
Second. Calibration Adjust Value	40059	Float	2	R/W			Cal Temperature Adjust Value
Temporary Meas.[0]	40061	Float	2	R			Temporary Measurement[0]
Temporary Meas.[1]	40063	Float	2	R			Temporary Measurement[1]
Constant cell	40065	Float	2	R/W			Constant cell
Temperature Compensation	40067	Unsigned Integer	1	R/W			Temperature Compensation
Coefficient Compensation	40068	Float	2	R/W			Compensation Coefficient
Temperature Reference	40070	Float	2	R/W			Temperature Reference
AutomaticTemperature	40072	Unsigned Integer	1	R/W			AutomaticTemperature
Manual Temperature	40073	Float	2	R/W			Manual Temperature
Temperature Offset	40075	Float	2	R/W			Temperature Offset
---	40077	Unsigned Integer	1	R			&RS_tgMainMeas
---	40078	Unsigned Integer	1	R			&RS_tgSecondMeas
---	40079	Unsigned Integer	1	R			&RS_tgCalMainMeas
---	40080	Unsigned Integer	1	R			&RS_tgCalSecondMeas
---	40081	Unsigned Integer	1	R			&RS_tgCalMainAdjValue
---	40082	Unsigned Integer	1	R			&RS_tgCalSecondAdjValue
---	40083	Unsigned Integer	1	R			&RS_tgTemporary0
---	40084	Unsigned Integer	1	R			&RS_tgTemporary1
---	40085	Unsigned Integer	1	R			&RS_tgTempOffsetCorr
---	40086	Unsigned Integer	1	R/W			&RS_tgTempRef
---	40087	Unsigned Integer	1	R/W			&RS_tgTempManual
---	40088	Unsigned Integer	1	R/W			Analogue Output Command
SerialNumber	40089	String	6	R			Internal Use
---	40095	Float	2	R			&MESS_OutputVoltage
Averaging	40097	Unsigned Integer	1	R/W			Averaging
---	40098	Unsigned Integer	1	R/W			&MESS_cal_code
Delay from last Calibration	40099	Unsigned Integer	1	R/W			Delay from last Calibration
Time from Start up	40100	Unsigned Integer	1	R			Time from Start up
Time of Humidity Bag	40101	Unsigned Integer	1	R			Time of Humidity Bag
Conductivity Log Interval	40102	Unsigned Integer	1	R/W			Conductivity Log Interval
Temperature Log Interval	40103	Unsigned Integer	1	R/W			Temperature Log Interval

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