Modbus Register
LDO sc (old)

V1.50

Be Right™

LDO sc (old) V1.50

Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
Oxygen Concentration	40001	Float	2	R		0 /20	Oxygen Concentration
Percent Saturation	40003	Float	2	R		0 /200	Percent Saturation
Temperature	40005	Float	2	R		-5 /150	Temperature
Total Phase Shift	40007	Float	2	R		-360 /360	Total Phase Shift
Blue Phase Shift	40009	Float	2	R		-360 /360	Blue LED Phase Shift
Red Phase Shift	40011	Float	2	R		-360 /360	Red LED Phase Shift
Blue Amplitude	40013	Float	2	R		0 /1	Blue LED Amplitude
Red Amplitude	40015	Float	2	R		0 /1	Red LED Amplitude
Version	40017	Float	2	R		0 /100	Software Version Number of Application Code
Coeff 0	40019	Float	2	R/W			Curve Coerff 0
Coeff 1	40021	Float	2	R/W			Curve Coeff 1
Coeff 2	40023	Float	2	R/W			Curve Coeff2
Coeff 3	40025	Float	2	R/W			Curve Coeff 3
Coeff 4	40027	Float	2	R/W			Calc. Partial Pressure of Oxygen
Coeff 5	40029	Float	2	R/W			Temperature, Celsius
Coeff 6	40031	Float	2	R/W			Phase Offset Correction
Coeff 7	40033	Float	2	R/W			Phase Slope Correction
Coeff 8	40035	Float	2	R/W			Phase for 0 torr at current temperature
Calib Value	40037	Float	2	R/W			Value of sample during calibration
DO Value	40039	Float	2	R/W			Non-averged DO value
Altitude/Pressure	40041	Float	2	R/W			Altitude or Pressure of sensor
Salinity	40043	Float	2	R/W			Salinity of Sample
Offset Corr	40045	Float	2	R/W			Offset correction to readings
Slope Corr	40047	Float	2	R/W			Slope correction to readings
PhT12 0	40049	Float	2	R/W			Phase at T=11.9,pO2=0
PhT12 5	40051	Float	2	R/W			Phase at T=11.9,pO2=5
PhT12 20	40053	Float	2	R/W			Phase at T=11.9,pO2=20
PhT12 50	40055	Float	2	R/W			Phase at T=11.9,pO2=50
PhT12 100	40057	Float	2	R/W			Phase at T=11.9,pO2=100
PhT12 150	40059	Float	2	R/W			Phase at T=11.9,pO2=150
PhT12 220	40061	Float	2	R/W			Phase at T=11.9,pO2=220
PhT25 0	40063	Float	2	R/W			Phase at T=24.9,pO2=0
PhT25 5	40065	Float	2	R/W			Phase at T=24.9,pO2=5
PhT25 20	40067	Float	2	R/W			Phase at T=24.9,pO2=20
PhT25 50	40069	Float	2	R/W			Phase at T=24.9,pO2=50
PhT25 100	40071	Float	2	R/W			Phase at T=24.9,pO2=100
PhT25 150	40073	Float	2	R/W			Phase at T=24.9,pO2=150
PhT25 220	40075	Float	2	R/W			Phase at T=24.9,pO2=220
PhT37 0	40077	Float	2	R/W			Phase at T=37.6,pO2=0
PhT37 5	40079	Float	2	R/W			Phase at T=37.6,pO2=5
PhT37 20	40081	Float	2	R/W			Phase at T=37.6,pO2=20
PhT37 50	40083	Float	2	R/W			Phase at T=37.6,pO2=50
PhT37 100	40085	Float	2	R/W			Phase at T=37.6,pO2=100
PhT37 150	40087	Float	2	R/W			Phase at T=37.6,pO2=150
PhT37 220	40089	Float	2	R/W			Phase at T=37.6,pO2=220
Conc Units	40091	Integer	1	R/W			unit: 0=mg/l, 2=ppm, 10=%
Alt Press Units	40092	Integer	1	R/W			unit: 13=meters, 43=feet, 45=mmHg, 47=torr
Temp Units	40093	Integer	1	R/W			unit: 25=Celsius, 26=Fahrenheit
Sensor Code	40094	String	5	R/W			Calibration Code of Sensor Cap

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Sensor Name	40099	String	6	R/W			Customer Name for Sensor
Signal Avg	40105	Integer	1	R/W			Number of seconds to average reading
Log Setup	40106	Integer	1	R/W			Data logging interval in seconds
LED Operation	40107	Integer	1	R/W			0=NormalOp,1=Blue on,2=Red On
Function Code	40108	Integer	1	R/W			
NextState	40109	Integer	1	R/W			
ConcTagIndex	40110	Integer	1	R/W			
TempTagIndex	40111	Integer	1	R/W			
AltPressTagIndex	40112	Integer	1	R/W			
OffsetCorrTagIndex	40113	Integer	1	R/W			
CalValueTagIndex	40114	Integer	1	R/W			
Serial Number	40115	String	6	R/W			Manufacturer Serial Number
Output Mode	40121	Integer	1	R/W			

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