Modbus Register
Phosphax sc HR

V 2.30

HACH®

Be Right™

Phosphax sc HR V 2.30

Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
	40001	Float	2	R			
	40005	String	8	R/W			
	40013	Float	2	R			
	40015	Float	2	R			
	40017	Float	2	R			
	40019	Float	2	R			
	40021	Float	2	R			
	40023	Float	2	R			
	40025	Integer	1	R			
	40026	Integer	1	R			
	40027	Unsigned Integer	1	R	%		
	40028	Unsigned Integer	1	R			0/1
	40029	Unsigned Integer	1	R	%		
	40030	Float	2	R	C		
	40032	Float	2	R	mg /l		
	40034	String	8	R/W			
	40042	Unsigned Integer	1	R			
	40043	Unsigned Integer	1	R	s		
	40044	Float	2	R	C		
	40046	Float	2	R		PO4-P	
	40048	Float	2	R		PO4-P	
	40050	Float	2	R		PO4	
	40052	Float	2	R		PO4	
	40054	Float	2	R		P2O5	
	40056	Float	2	R		P2O5	
	40058	Float	2	R			
	40060	Unsigned Integer	1	R/W			0/1/2/3/4/5/6/7/8/9/10/11/12
	40061	Unsigned Integer	1	R/W			1/2/3/4/5/6/7/8/9/10/11/12
	40062	Float	2	R			
	40064	Float	2	R			
	40066	Float	2	R			
	40068	Float	2	R			
	40070	Unsigned Integer	1	R	%		
	40071	Unsigned Integer	1	R/W			
	40072	Unsigned Integer	1	R/W			
	40073	Unsigned Integer	1	R/W			
	40074	Unsigned Integer	1	R/W			
	40075	Unsigned Integer	1	R/W			
	40076	Unsigned Integer	1	R/W			

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Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
	40077	Unsigned Integer	1	R/W			
	40078	Unsigned Integer	1	R/W			
	40079	Float	2	R	BAR		
	40081	Float	2	R	BAR		
	40083	Float	2	R/W			
	40096	Unsigned Integer	1	R/W			
	40097	Unsigned Integer	1	R/W			0/1/2
	40098	Unsigned Integer	1	R/W			0/1/2
	40099	Float	2	R			
	40101	Float	2	R	%		
	40103	Unsigned Integer	1	R/W			U0/2
	40104	Float	2	R			
	40106	String	6	R			
	40112	Unsigned Integer	1	R	%		
	40113	Time2	2	R/W			
	40115	Unsigned Integer	1	R/W			
	40117	Unsigned Integer	1	R/W			
	40118	Unsigned Integer	1	R/W			0/1/3/6/8/12/24
	40119	Time2	2	R/W			
	40121	Unsigned Integer	1	R/W			P15/14/16
	40122	Float	2	R/W			
	40125	Unsigned Integer	1	R/W			P15/14/16
	40126	Unsigned Integer	1	R/W			U0/2
	40127	Unsigned Integer	1	R	%		
	40128	Unsigned Integer	1	R/W			
	40129	Unsigned Integer	1	R/W			0/1
	40130	Float	2	R			
	40132	Unsigned Integer	1	R			0/1/2/3/4/5/6/7/8/9/10/11/12/13/14/15/16/17
	40133	Unsigned Integer	1	R/W			
	40134	Unsigned Integer	1	R/W			
	40135	Unsigned Integer	1	R/W			
	40136	Unsigned Integer	1	R/W			

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Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
	40137	Unsigned Integer	1	R/W			
	40138	Unsigned Integer	1	R/W			
	40140	Unsigned Integer	1	R/W			
	40143	String	8	R			
	40151	Unsigned Integer	1	R/W			0/1
	40152	Unsigned Integer	1	R/W			20/15/10/5
	40155	Unsigned Integer	1	R/W	%		
	40158	Unsigned Integer	1	R/W	%		
	40160	Integer	1	R/W	Day		
	40163	Integer	1	R/W	Day		
	40172	Unsigned Integer	1	R			
	40173	Unsigned Integer	1	R			
	40174	Float	2	R			
	40176	Unsigned Integer	2	R/W	h		
	40180	Integer	1	R/W	Day		
	40189	Integer	1	R/W	Day		
	40198	Time2	2	R/W			
	40200	Time2	2	R/W			
	40211	Unsigned Integer	1	R/W			0/1
	40216	Time2	2	R			
	40218	Time2	2	R			
	40220	Time2	2	R			
	40222	Time2	2	R			
	40224	Time2	2	R			
	40226	Time2	2	R			
	40228	Time2	2	R			
	40230	Time2	2	R			
	40232	Time2	2	R			
	40234	Time2	2	R			
	40236	Float	2	R	mg /l		
	40238	Float	2	R	mg /l		
	40240	Float	2	R	mg /l		
	40242	Float	2	R	mg /l		
	40244	Float	2	R	mg /l		
	40246	Float	2	R	mg /l		
	40248	Float	2	R	mg /l		
	40250	Float	2	R	mg /l		
	40252	Float	2	R	mg /l		
	40256	Unsigned Integer	1	R/W	%		14/10/8/0
	40257	Unsigned Integer	1	R/W	%		40/30/15

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Name	Register	Data Type	Length	Access Mode	Discrete Range	Min / Max	Description
	40258	Unsigned Integer	1	R/W			0/1
	40260	Unsigned Integer	1	R/W			0/1
	40262	Float	2	R/W			
	40264	Unsigned Integer	1	R/W			0/1
	40271	Unsigned Integer	1	R/W			0/1
	40273	Float	2	R	C		
	40275	Float	2	R	C		
	40277	Unsigned Integer	2	R			
	40279	Unsigned Integer	2	R			
	40281	String	8	R/W			
	40305	Unsigned Integer	1	R/W			0/1
	40306	Unsigned Integer	1	R/W			0/1
	40327	Float	2	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