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## 1. “Battery Data” group

Modbus supported functions: **0x03** (Read Holding Registers) and **0x04** (Read Input Registers).

Address	Item	Unit	Length	Access	Values / Range
0x0000	Battery Status	enum	1	R	1 = unknown 2 = battery normal 3 = battery low 4 = battery depleted 5 = battery discharging 6 = battery failure
0x0001	Seconds On Battery (High Word)	seconds	2	R	
0x0002	Seconds On Battery (Low Word)				
0x0003	Estimated Minutes Remaining	minutes	1	R	
0x0004	Estimated Charge Remaining	%	1	R	
0x0005	Battery Voltage	V * 10	1	R	
0x0006	Battery Current	A * 10	1	R	

## 2. “Input Data” group

Modbus supported functions: **0x03** (Read Holding Registers) and **0x04** (Read Input Registers).

Address	Item	Unit	Length	Access
0x0010	Input Line Bad	counter	1	R
0x0011	Input Number of Lines	number	1	R
0x0012	Input Frequency phase 1	Hz * 10	1	R
0x0013	Input Frequency phase 2	Hz * 10	1	R
0x0014	Input Frequency phase 3	Hz * 10	1	R
0x0015	Input Voltage phase 1	V * 10	1	R
0x0016	Input Voltage phase 2	V * 10	1	R
0x0017	Input Voltage phase 3	V * 10	1	R
0x0018	Input Current phase 1	A * 10	1	R
0x0019	Input Current phase 2	A * 10	1	R
0x001A	Input Current phase 3	A * 10	1	R
0x001B	Input Active Power phase 1 (High Word)	W	2	R
0x001C	Input Active Power phase 1 (Low Word)			
0x001D	Input Active Power phase 2 (High Word)	W	2	R
0x001E	Input Active Power phase 2 (Low Word)			
0x001F	Input Active Power phase 3 (High Word)	W	2	R
0x0020	Input Active Power phase 3 (Low Word)			

## 3. “Output Data” group

Modbus supported functions: **0x03** (Read Holding Registers) and **0x04** (Read Input Registers).

Address	Item	Unit	Length	Access	Values / Range
0x0030	Output Source	enum	1	R	1 = other 2 = none 3 = normal 4 = bypass 5 = battery 6 = booster 7 = reducer
0x0031	Output Number Lines	number	1	R	
0x0032	Output Frequency phase 1	Hz * 10	1	R	
0x0035	Output Voltage phase 1	V * 10	1	R	
0x0036	Output Voltage phase 2	V * 10	1	R	
0x0037	Output Voltage phase 3	V * 10	1	R	
0x0038	Output Current phase 1	A * 10	1	R	
0x0039	Output Current phase 2	A * 10	1	R	
0x003A	Output Current phase 3	A * 10	1	R	
0x003B 0x003C	Output Active Power phase 1 (High Word) Output Active Power phase 1 (Low Word)	W	2	R	
0x003D 0x003E	Output Active Power phase 2 (High Word) Output Active Power phase 2 (Low Word)	W	2	R	
0x003F 0x0040	Output Active Power phase 3 (High Word) Output Active Power phase 3 (Low Word)	W	2	R	
0x0041	Output Percent Load phase 1	% * 10	1	R	
0x0042	Output Percent Load phase 2	% * 10	1	R	
0x0043	Output Percent Load phase 3	% * 10	1	R	
0x0044 0x0045	Output Apparent Power phase 1 (High Word) Output Apparent Power phase 1 (Low Word)	VA	2	R	
0x0046 0x0047	Output Apparent Power phase 2 (High Word) Output Apparent Power phase 2 (Low Word)	VA	2	R	
0x0048 0x0049	Output Apparent Power phase 3 (High Word) Output Apparent Power phase 3 (Low Word)	VA	2	R	

## 4. “Bypass Data” group

Modbus supported functions: **0x03** (Read Holding Registers) and **0x04** (Read Input Registers).

Address	Item	Unit	Length	Access
0x0050	Bypass Number Lines	number	1	R
0x0051	Bypass Frequency phase 1	Hz * 10	1	R
0x0054	Bypass Voltage phase 1	V * 10	1	R
0x0055	Bypass Voltage phase 2	V * 10	1	R
0x0056	Bypass Voltage phase 3	V * 10	1	R
0x0057	Bypass Current phase 1	A * 10	1	R
0x0058	Bypass Current phase 2	A * 10	1	R
0x0059	Bypass Current phase 3	A * 10	1	R
0x005A	Bypass Active Power phase 1 (High Word)	W	2	R
0x005B	Bypass Active Power phase 1 (Low Word)			
0x005C	Bypass Active Power phase 2 (High Word)	W	2	R
0x005D	Bypass Active Power phase 2 (Low Word)			
0x005E	Bypass Active Power phase 3 (High Word)	W	2	R
0x005F	Bypass Active Power phase 3 (Low Word)			

## 5. “Miscellaneous Data” group

Modbus supported functions: **0x03** (Read Holding Registers) and **0x04** (Read Input Registers).

Address	Item	Unit	Length	Access	Values / Range
0x0007	UPS Temperature	°C * 10	1	R	
0x0091	UPS Type	enum	1	R	1 = On-Line 2 = Off-Line 3 = Line-Interactive 4 = Three Phase / Three phase 5 = Other 10 = Three-phase / Single phase

## 5. “Alarms” group

Modbus supported functions: **0x02** (Read Discrete Inputs).

Address	Item	Unit	Access
0x0000	Battery Bad	bit	R
0x0001	On Battery	bit	R
0x0002	Low Battery	bit	R
0x0003	Battery Depleted	bit	R
0x0004	Over Temperature	bit	R
0x0005	Input Bad	bit	R
0x0006	Output Bad	bit	R
0x0007	Output Overload	bit	R
0x0008	On Bypass	bit	R
0x0009	Bypass Bad	bit	R
0x000C	Charger Failed	bit	R
0x000F	Fan Failure	bit	R
0x0010	Fuse Failure	bit	R
0x0011	General Fault	bit	R
0x0012	Diagnostic Test Failed	bit	R
0x0013	Communications Lost	bit	R
0x0017	Test In Progress	bit	R

## 6. “Tests” group

- Read: **0x03** (Read Holding Registers) and **0x04** (Read Input Registers).
- Write: **0x06** (Write Single Register)

Address	Item	Unit	Length	Access	Values / Range
0x0070	Battery Test Setting Time	minutes	1	R/W	
0x0071	Battery Test Result	enum	1	R	1 = done, passed 2 = done, warning 4 = aborted 5 = in progress 6 = no test initiated (default)
0x0072 0x0073	Battery Test Start Time (High Word) Battery Test Start Time (Low Word)	timestamp	2	R	
0x0074 0x0075	Battery Test Elapsed Time (High Word) Battery Test Elapsed Time (Low Word)	timeticks	2	R	

## 7. “Control” group

Modbus supported functions:

- Read: **0x03** (Read Holding Registers) and **0x04** (Read Input Registers)
- Write single register: **0x06** (Write Single Register)
- Write multiple registers: **0x10** (Write Multiple Register)

Address	Item	Unit	Length	Access	Values / Range
0x0010	Shutdown Type	enum	1	R/W	1 = output 2 = system
0x0011 0x0012	Shutdown After Delay (High Word) Shutdown After Delay (Low Word)	seconds	2	R/W	
0x0013 0x0014	Startup After Delay (High Word) Startup After Delay (Low Word)	seconds	2	R/W	
0x0015 0x0016	Reboot After Delay (High Word) Reboot After Delay (Low Word)	seconds	2	R/W	Range: 1~300
0x0017	Auto Restart Action	enum	1	R/W	1 = on 2 = off
0x0018	Ups Sleep Time Setting	minutes	1	R/W	Range: 0~10000
0x0019	Ups Control Setting	enum	1	R/W	1 = turn off UPS 2 = put UPS to sleep mode 3 = turn on UPS / cancel shutdown 4 = none (default)
0x001A	UPS Shutdown Delay	seconds	1	R/W	
0x0030	Battery Test Action	Enum	1	R/W	0 = none (default) 1 = quick battery test 2 = battery test until battery low 3 = timed battery test 4 = cancel active battery test 5 = clear last battery test results
0x0031	Battery Test Setting Time	minutes	1	R/W	

## 8. “Config” group

Modbus supported functions: **0x03** (Read Holding Registers) and **0x04** (Read Input Registers).

Address	Item	Unit	Length	Access	Values / Range
0x0000	Config Input Voltage	V	1	R/W	
0x0001	Config Input Frequency	Hz	1	R/W	
0x0002	Config Output Voltage	V	1	R/W	
0x0003	Config Output Frequency	Hz	1	R/W	
0x0004	Config Output Apparent Power (High Word)	VA	2	R	
0x0005	Config Output Apparent Power (Low Word)				
0x0006	Config Output Active Power (High Word)	W	2	R	
0x0007	Config Output Active Power (Low Word)				
0x0008	Config Low Voltage Transfer Point	V	1	R/W	
0x0009	Config High Voltage Transfer Point	V	1	R/W	
0x000A	Config Over Temperature Set Point	°F	1	R/W	Range: 50~212
0x000C	Config Low Battery Time	minutes	1	R/W	
0x000D	Config Audible Status	enum	1	R/W	1 = disabled 2 = enabled 3 = muted
0x000E	Config Over Temperature Set Point	°C	1	R/W	Range: 10~100