

Easy UPS 3S Modbus Register Map

Version History Details			
Serial #	Date	Author	Description Details
AA	5/Mar/2018	ETHAN	first revision history

Notes:

1. Function codes 3 are supported
2. Modbus serial RTU and ASCII is supported.
3. Single-register reads of reserved or undefined registers will return an error. Block reads which begin with a valid register will return zeros for undefined registers.
4. Strings are two characters per register, first character in high-order byte, second character in low-order byte. Printable ASCII only.
5. Data Type column: " int "=signed 16-bit integer, " Unsigned int " = unsigned 16-bit integer.
6. Input three phase and output one phase series just have phase A; the registers of phase B and C be reserved.

Modicon Standard Register Number	Data Point	Data Type (Hi-Lo)	Coefficient	Unit	Valid Response
10000	Bypass voltage Phase A	Unsigned int	0.1	V	
10001	Bypass voltage Phase B	Unsigned int	0.1	V	
10002	Bypass voltage Phase C	Unsigned int	0.1	V	
10003	Bypass current Phase A	Unsigned int	0.1	A	
10004	Bypass current Phase B	Unsigned int	0.1	A	

10005	Bypass current Phase C	Unsigned int	0.1	A	
10006	Bypass frequency Phase A	Unsigned int	0.01	Hz	
10007	Bypass frequency Phase B	Unsigned int	0.01	Hz	
10008	Bypass frequency Phase C	Unsigned int	0.01	Hz	
10009	Bypass PF_A	Unsigned int	0.01		
10010	Bypass PF_B	Unsigned int	0.01		
10011	Bypass PF_C	Unsigned int	0.01		
10012	Input voltage Phase A	Unsigned int	0.1	V	
10013	Input voltage Phase B	Unsigned int	0.1	V	
10014	Input voltage Phase C	Unsigned int	0.1	V	
10015	Input current Phase A	Unsigned int	0.1	A	
10016	Input current Phase B	Unsigned int	0.1	A	
10017	Input current Phase C	Unsigned int	0.1	A	
10018	Input frequency Phase A	Unsigned int	0.01	Hz	
10019	Input frequency Phase B	Unsigned int	0.01	Hz	

10020	Input frequency Phase C	Unsigned int	0.01	Hz	
10021	Input PF_A	Unsigned int	0.01		
10022	Input PF_B	Unsigned int	0.01		
10023	Input PF_C	Unsigned int	0.01		
10024	Output voltage Phase A	Unsigned int	0.1	V	
10025	Output voltage Phase B	Unsigned int	0.1	V	
10026	Output voltage Phase C	Unsigned int	0.1	V	
10027	Output current Phase A	Unsigned int	0.1	A	
10028	Output current Phase B	Unsigned int	0.1	A	
10029	Output current Phase C	Unsigned int	0.1	A	
10030	Output frequency Phase A	Unsigned int	0.01	Hz	
10031	Output frequency Phase B	Unsigned int	0.01	Hz	
10032	Output frequency Phase C	Unsigned int	0.01	Hz	
10033	Output PF_A	Unsigned int	0.01		
10034	Output PF_B	Unsigned int	0.01		

10035	Output PF_C	Unsigned int	0.01		
10036	Output kVA Phase A	Unsigned int	0.1/1	kVA/VA	
10037	Output kVA Phase B	Unsigned int	0.1	kVA	
10038	Output kVA Phase C	Unsigned int	0.1	kVA	
10039	Output kW Phase A	Unsigned int	0.1/1	kW/W	
10040	Output kW Phase B	Unsigned int	0.1	kW	
10041	Output kW Phase C	Unsigned int	0.1	kW	
10042	Output kVar Phase A	Unsigned int	0.1/1	kVar/Var	
10043	Output kVar Phase B	Unsigned int	0.1	kVar	
10044	Output kVar Phase C	Unsigned int	0.1	kVar	
10045	Load percent Phase A	Unsigned int	0.1	%	
10046	Load percent Phase B	Unsigned int	0.1	%	
10047	Load percent Phase C	Unsigned int	0.1	%	
10048	Environment temperature	Unsigned int	0.1	°C	
10049	Battery voltage positive	Unsigned int	0.1	V	

10050	Battery voltage negative	Unsigned int	0.1	V	
10051	Battery current positive	int	0.1	A	
10052	Battery current negative	int	0.1	A	
10053	Battery temperature	Unsigned int	0.1	°C	
10054	Battery remain time	Unsigned int	0.1	min	
10055	Battery capacity	Unsigned int	0.1	%	
10056	Reserved				
10057	Reserved				
10058	Reserved				
10059	Reserved				
10060	Reserved				
10061	Reserved				
10062	Reserved				
10063	Reserved				
10064	Reserved				
10065	Reserved				
10066	Reserved				
10067	Reserved				

10068	Reserved				
10069	Reserved				
10070	Reserved				
10071	Rectifier First Version Number	Unsigned int	1		
10072	Rectifier Second Version Number	Unsigned int	1		
10073	Invertor First Version Number	Unsigned int	1		
10074	Invertor Second Version Number	Unsigned int	1		
10075	SKU No 1	Unsigned int	1		<p>10075-10079 are SKU No setting registers. The maximum length of model string is 10 characters, every character accounting for 8-bit binary, encoding method is ASCII. Every register contains two character, high bit ahead. For example: E3SUPS30KH show as follows,</p> <p>10075 Bit15-8 : 0x45(E) Bit7-0 : 0x33(3)</p> <p>10076 Bit15-8: 0x53(S) Bit7-0: 0x55(U)</p> <p>Note: If the character not be used, it should be space(0x20).</p>
10076	SKU No 2	Unsigned int	1		
10077	SKU No 3	Unsigned int	1		
10078	SKU No 4	Unsigned int	1		
10079	SKU No 5	Unsigned int	1		

10080	Serial No.1	Unsigned int	1		10080-10087 are Serial No. registers. The maximum length of company name string is 15 characters, every character accounting for 8-bit binary, encoding method is ASCII. Every register contains two characters, high bit ahead.
10081	Serial No. 2	Unsigned int	1		
10082	Serial No. 3	Unsigned int	1		
10083	Serial No. 4	Unsigned int	1		
10084	Serial No. 5	Unsigned int	1		
10085	Serial No. 6	Unsigned int	1		
10086	Serial No. 7	Unsigned int	1		
10087	Serial No. 8	Unsigned int	1		
10088	Rating Rectifier Voltage	Unsigned int	1	V	
10089	Rating Rectifier Frequency	Unsigned int	1	Hz	
10090	Rating Source Bypass Voltage	Unsigned int	1	V	
10091	Rating Bypass Source Frequency	Unsigned int	1	Hz	
10092	Rating Output Voltage	Unsigned int	1	V	
10093	Rating Output Frequency	Unsigned int	1	Hz	
10094	Battery Number	Unsigned int	1		

10095	Rating Power	Unsigned int	1	kVA	
10096	UPS Type	Unsigned int			Bit0-Bit2: Input and output phase 1: 3in-3out 2: 3in -1out 3: 1in -1out 4: 1in -3out 5: 2in -2out Bit3-Bit15: Reserved
10097	Reserved				
10098	Reserved				
10099	Reserved				
10100	Reserved				
10101	Reserved				
10102	Reserved				
10103	Reserved				
10104	Reserved				
10105	Reserved				
10106	Reserved				
10107	Reserved				
10108	Load On Source	Unsigned int			0: None 1: UPS Supply 2: Bypass Supply

10109	Battery Status	Unsigned int			0: Not Work 1: Float Charge 2: Boost Charge 3: Discharge
10110	Battery Connect Status	Unsigned int			0: Not Connect 1: Connect
10111	Maintain Cb Status	Unsigned int			0: Open 1: Close
10112	EPO	Unsigned int			0: None 1: EPO
10113	Generator Input	Unsigned int			0: Disconnect 1: Connect
10114	Input Fail	Unsigned int			0: Normal 1: Abnormal
10115	Bypass Sequence Fail	Unsigned int			0: Normal 1: Abnormal
10116	Bypass Voltage Fail	Unsigned int			0: Normal 1: Abnormal
10117	Bypass Fail	Unsigned int			0: Normal 1: Abnormal
10118	Bypass Over Load	Unsigned int			0: No 1: Yes
10119	Bypass Over Load Timeout	Unsigned int			0: No 1: Yes
10120	Bypass Untrack	Unsigned int			0: No 1: Yes
10121	Tx Time Limit	Unsigned int			0: No 1: Yes
10122	Output Shorted	Unsigned int			0: No 1: Yes

10123	Battery EOD	Unsigned int			0: No 1: Yes
10124	Battery Test Result	Unsigned int			0: No Test 1: Test Success 2: Test Fail 3: Testing
10125	Battery Maintain Result	Unsigned int			0: No Maintain 1: Maintain success 2: Maintain Fail 3: Maintaining
10126	Manual Tx Bypass	Unsigned int			0: No 1: Yes
10127	Battery Volt Low	Unsigned int			0: No 1: Yes
10128	Battery wiring incorrect	Unsigned int			0: No 1: Yes
10129	Rectifier Status	Unsigned int			0: OFF 1: Soft Start 2: Normal Work
10130	Inverter Status	Unsigned int			0: OFF 1: Soft Start 2: Normal Work
10131	Input Neutral Lost	Unsigned int			0: No Lost 1: Lost
10132	EOD System Inhibited	Unsigned int			0: No 1: Inhibited
10133	Rectifier fault	Unsigned int			0: Normal 1: Abnormal
10134	Inverter fault	Unsigned int			0: Normal 1: Abnormal
10135	Rectifier Over Temperature	Unsigned int			0: Normal 1: Abnormal

10136	Fan fault	Unsigned int			0: Normal 1: Abnormal
10137	Inverter Over Load	Unsigned int			0: Normal 1: Abnormal
10138	Inverter Over Load Timeout	Unsigned int			0: Normal 1: Abnormal
10139	Inverter Over Temperature	Unsigned int			0: Normal 1: Abnormal
10140	Inverter Protect	Unsigned int			0: Normal 1: Abnormal
10141	Manual Shutdown	Unsigned int			0: Normal 1: Shutdown
10142	Reserved				
10143	Reserved				
10144	Reserved				
10145	Reserved				
10146	Reserved				
10147	Reserved				
10148	Reserved				
10149	Reserved				