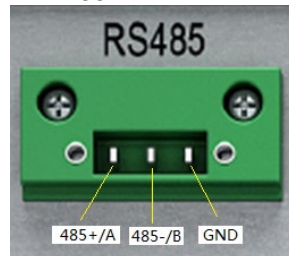


# Easy UPS 3S 208 V UL RS485 Modbus Register Map

The three pins for RS485 are shown below.



## 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. Format 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.
- Default speed : 9600 Baud
  - Data format : ASCII
  - Parity : None Parity
  - Number of stop bit : 1 Stop Bit

Read Function	Address	Parameter	Description	Format	Size	Gain	Unit
0x03	10000	Bypass voltage Phase A	Bypass voltage Phase A	Unsigned int	2	0.1	V
0x03	10001	Bypass voltage Phase B	Bypass voltage Phase B	Unsigned int	2	0.1	V
0x03	10002	Bypass voltage Phase C	Bypass voltage Phase C	Unsigned int	2	0.1	V
0x03	10003	Bypass current Phase A	Bypass current Phase A	Unsigned int	2	0.1	A
0x03	10004	Bypass current Phase B	Bypass current Phase B	Unsigned int	2	0.1	A
0x03	10005	Bypass current Phase C	Bypass current Phase C	Unsigned int	2	0.1	A
0x03	10006	Bypass frequency Phase A	Bypass frequency Phase A	Unsigned int	2	0.01	Hz
0x03	10007	Bypass frequency Phase B	Bypass frequency Phase B	Unsigned int	2	0.01	Hz
0x03	10008	Bypass frequency Phase C	Bypass frequency Phase C	Unsigned int	2	0.01	Hz
0x03	10009	Bypass PF_A	Bypass Power factor A	Unsigned int	2	0.01	/
0x03	10010	Bypass PF_B	Bypass Power factor B	Unsigned int	2	0.01	/
0x03	10011	Bypass PF_C	Bypass Power factor C	Unsigned int	2	0.01	/

Read Function	Address	Parameter	Description	Format	Size	Gain	Unit
0x03	10012	Input voltage Phase A	Input voltage Phase A	Unsigned int	2	0.1	V
0x03	10013	Input voltage Phase B	Input voltage Phase B	Unsigned int	2	0.1	V
0x03	10014	Input voltage Phase C	Input voltage Phase C	Unsigned int	2	0.1	V
0x03	10015	Input current Phase A	Input current Phase A	Unsigned int	2	0.1	A
0x03	10016	Input current Phase B	Input current Phase B	Unsigned int	2	0.1	A
0x03	10017	Input current Phase C	Input current Phase C	Unsigned int	2	0.1	A
0x03	10018	Input frequency Phase A	Input frequency Phase A	Unsigned int	2	0.01	Hz
0x03	10019	Input frequency Phase B	Input frequency Phase B	Unsigned int	2	0.01	Hz
0x03	10020	Input frequency Phase C	Input frequency Phase C	Unsigned int	2	0.01	Hz
0x03	10021	Input PF_A	Input Power factor A	Unsigned int	2	0.01	/
0x03	10022	Input PF_B	Input Power factor B	Unsigned int	2	0.01	/
0x03	10023	Input PF_C	Input Power factor C	Unsigned int	2	0.01	/
0x03	10024	Output voltage Phase A	Output voltage Phase A	Unsigned int	2	0.1	V
0x03	10025	Output voltage Phase B	Output voltage Phase B	Unsigned int	2	0.1	V
0x03	10026	Output voltage Phase C	Output voltage Phase C	Unsigned int	2	0.1	V
0x03	10027	Output current Phase A	Output current Phase A	Unsigned int	2	0.1	A
0x03	10028	Output current Phase B	Output current Phase B	Unsigned int	2	0.1	A
0x03	10029	Output current Phase C	Output current Phase C	Unsigned int	2	0.1	A
0x03	10030	Output frequency Phase A	Output frequency Phase A	Unsigned int	2	0.01	Hz
0x03	10031	Output frequency Phase B	Output frequency Phase B	Unsigned int	2	0.01	Hz
0x03	10032	Output frequency Phase C	Output frequency Phase C	Unsigned int	2	0.01	Hz
0x03	10033	Output PF_A	Output Power factor A	Unsigned int	2	0.01	/
0x03	10034	Output PF_B	Output Power factor B	Unsigned int	2	0.01	/
0x03	10035	Output PF_C	Output Power factor C	Unsigned int	2	0.01	/
0x03	10036	Output kVA Phase A	Output kVA Phase A	Unsigned int	2	0.1/1	kVA/VA
0x03	10037	Output kVA Phase B	Output kVA Phase B	Unsigned int	2	0.1	kVA
0x03	10038	Output kVA Phase C	Output kVA Phase C	Unsigned int	2	0.1	kVA
0x03	10039	Output kW Phase A	Output kW Phase A	Unsigned int	2	0.1/1	kW/W
0x03	10040	Output kW Phase B	Output kW Phase B	Unsigned int	2	0.1	kW
0x03	10041	Output kW Phase C	Output kW Phase C	Unsigned int	2	0.1	kW
0x03	10042	Output kvar Phase A	Output kvar Phase A	Unsigned int	2	0.1/1	kvar/var
0x03	10043	Output kvar Phase B	Output kvar Phase B	Unsigned int	2	0.1	kvar
0x03	10044	Output kvar Phase C	Output kvar Phase C	Unsigned int	2	0.1	kvar
0x03	10045	Load percent Phase A	Load percent Phase A	Unsigned int	2	0.1	%
0x03	10046	Load percent Phase B	Load percent Phase B	Unsigned int	2	0.1	%
0x03	10047	Load percent Phase C	Load percent Phase C	Unsigned int	2	0.1	%
0x03	10048	External Battery temperature	External Battery temperature	Unsigned int	2	0.1	°C
0x03	10049	Battery voltage positive	Battery voltage positive	Unsigned int	2	0.1	V

Read Function	Address	Parameter	Description	Format	Size	Gain	Unit
0x03	10050	Battery voltage negative	Battery voltage negative	Unsigned int	2	0.1	V
0x03	10051	Battery current positive	Battery current positive	int	2	0.1	A
0x03	10052	Battery current negative	Battery current negative	int	2	0.1	A
0x03	10053	Internal Battery temperature	Internal Battery temperature	Unsigned int	2	0.1	°C
0x03	10054	Battery remain time	Battery remain time	Unsigned int	2	0.1	min
0x03	10055	Battery capacity	Battery capacity	Unsigned int	2	0.1	%
0x03	10056	Reserved					
0x03	10057	Reserved					
0x03	10058	Reserved					
0x03	10059	Reserved					
0x03	10060	Reserved					
0x03	10061	Reserved					
0x03	10062	Reserved					
0x03	10063	Reserved					
0x03	10064	Reserved					
0x03	10065	Reserved					
0x03	10066	Reserved					
0x03	10067	Reserved					
0x03	10068	Reserved					
0x03	10069	Reserved					
0x03	10070	Reserved					
0x03	10071	Rectifier First Version Number	Rectifier First Version Number	Unsigned int	2	1	/
0x03	10072	Rectifier Second Version Number	Rectifier Second Version Number	Unsigned int	2	1	/
0x03	10073	Inverter First Version Number	Inverter First Version Number	Unsigned int	2	1	/
0x03	10074	Inverter Second Version Number	Inverter Second Version Number	Unsigned int	2	1	/
0x03	10075	SKU No. 1	10075-10079 and 10097-10099 are SKU No. setting registers. The maximum length of model string is 16 characters, every character accounting for 8-bit binary, encoding method is ASCII. Every register contains two characters, high bit first. For example: E3SUPS30KH show as follows, 10075 Bit15-8: 0x45(E) Bit7-0: 0x33(3) 10076 Bit15-8: 0x53(S) Bit7-0: 0x55(U) Note: If the character should not be used, it should be NULL (0x00).	Unsigned int	2	1	/
0x03	10076	SKU No. 2		Unsigned int	2	1	/
0x03	10077	SKU No. 3		Unsigned int	2	1	/
0x03	10078	SKU No. 4		Unsigned int	2	1	/
0x03	10079	SKU No. 5		Unsigned int	2	1	/
0x03	10080	Serial No. 1	10080-10087 are Serial No. registers. The maximum length of company name string is 15 characters, every character	Unsigned int	2	1	/
0x03	10081	Serial No. 2		Unsigned int	2	1	/

Read Function	Address	Parameter	Description	Format	Size	Gain	Unit
0x03	10082	Serial No. 3	accounting for 8-bit binary, encoding method is ASCII. Every register contains two characters, high bit first.	Unsigned int	2	1	/
0x03	10083	Serial No. 4		Unsigned int	2	1	/
0x03	10084	Serial No. 5		Unsigned int	2	1	/
0x03	10085	Serial No. 6		Unsigned int	2	1	/
0x03	10086	Serial No. 7		Unsigned int	2	1	/
0x03	10087	Serial No. 8		Unsigned int	2	1	/
0x03	10088	Rating Rectifier Voltage	Rating Rectifier Voltage	Unsigned int	2	1	V
0x03	10089	Rating Rectifier Frequency	Rating Rectifier Frequency	Unsigned int	2	1	Hz
0x03	10090	Rating Source Bypass Voltage	Rating Source Bypass Voltage	Unsigned int	2	1	V
0x03	10091	Rating Bypass Source Frequency	Rating Bypass Source Frequency	Unsigned int	2	1	Hz
0x03	10092	Rating Output Voltage	Rating Output Voltage	Unsigned int	2	1	V
0x03	10093	Rating Output Frequency	Rating Output Frequency	Unsigned int	2	1	Hz
0x03	10094	Battery Number	Battery Number	Unsigned int	2	1	/
0x03	10095	Rating Power	Rating Power	Unsigned int	2	1	kVA
0x03	10096	UPS Type	Bit0-Bit2: Input and output phase 1: 3in-3out 2: 3in -1out 3: 1in -1out 4: 1in -3out 5: 2in -2out Bit3-Bit15:Reserved	Unsigned int	2	1	/
0x03	10097	Commercial reference no. 6	See Address 10075	Unsigned int	2	1	/
0x03	10098	Commercial reference no. 7		Unsigned int	2	1	/
0x03	10099	Commercial reference no. 8		Unsigned int	2	1	/
0x03	10100	Reserved					
0x03	10101	Reserved					
0x03	10102	Reserved					
0x03	10103	Reserved					
0x03	10104	Reserved					
0x03	10105	Reserved					
0x03	10106	Reserved					
0x03	10107	Reserved					
0x03	10108	Load On Source	0: None 1: UPS Supply 2: Bypass Supply	Unsigned int	2	1	/
0x03	10109	Battery Status	0: Inactive 1: Float Charge 2: Boost Charge 3: Discharge	Unsigned int	2	1	/

Read Function	Address	Parameter	Description	Format	Size	Gain	Unit
0x03	10110	Battery Connect Status	0: Not Connect 1: Connect	Unsigned int	2	1	/
0x03	10111	Maintain Cb Status	0: Open 1: Close	Unsigned int	2	1	/
0x03	10112	EPO	0: None 1: EPO	Unsigned int	2	1	/
0x03	10113	Generator Input	0: Disconnect 1: Connect	Unsigned int	2	1	/
0x03	10114	Input abnormal	0: Normal 1: Abnormal	Unsigned int	2	1	/
0x03	10115	Bypass sequence incorrect	0: Correct 1: Incorrect	Unsigned int	2	1	/
0x03	10116	Bypass voltage out of tolerance	0: OK 1: Out of tolerance	Unsigned int	2	1	/
0x03	10117	Bypass abnormal	0: Normal 1: Abnormal	Unsigned int	2	1	/
0x03	10118	Bypass Overload	0: No 1: Yes	Unsigned int	2	1	/
0x03	10119	Bypass Overload Timeout	0: No 1: Yes	Unsigned int	2	1	/
0x03	10120	Bypass Untrack	0: No 1: Yes	Unsigned int	2	1	/
0x03	10121	Tx Time Limit	0: No 1: Yes	Unsigned int	2	1	/
0x03	10122	Output Shorted	0: No 1: Yes	Unsigned int	2	1	/
0x03	10123	Battery EOD	0: No 1: Yes	Unsigned int	2	1	/
0x03	10124	Battery Test Result	0: No Test 1: Test successful 2: Test not completed 3: Testing	Unsigned int	2	1	/
0x03	10125	Battery Maintain Result	0: Not maintaining 1: Maintain success 2: Maintain not completed 3: Maintaining	Unsigned int	2	1	/
0x03	10126	Manual Tx Bypass	0: No 1: Yes	Unsigned int	2	1	/
0x03	10127	Battery Volt Low	0: No 1: Yes	Unsigned int	2	1	/
0x03	10128	Battery wiring incorrect	0: No 1: Yes	Unsigned int	2	1	/

Read Function	Address	Parameter	Description	Format	Size	Gain	Unit
0x03	10129	Rectifier Status	0:OFF 1:Soft Start 2:Active	Unsigned int	2	1	/
0x03	10130	Inverter Status	0:OFF 1:Soft Start 2:Active	Unsigned int	2	1	/
0x03	10131	Input Neutral Lost	0: Connected 1: Lost	Unsigned int	2	1	/
0x03	10132	EOD System Inhibited	0: No 1: Inhibited	Unsigned int	2	1	/
0x03	10133	Rectifier inoperable	0: OK 1: Inoperable	Unsigned int	2	1	/
0x03	10134	Inverter inoperable	0: OK 1: Inoperable	Unsigned int	2	1	/
0x03	10135	Rectifier Overtemperature	0: Normal 1: High	Unsigned int	2	1	/
0x03	10136	Fan inoperable	0: OK 1: Inoperable	Unsigned int	2	1	/
0x03	10137	Inverter Overload	0: Normal 1: Abnormal	Unsigned int	2	1	/
0x03	10138	Inverter Overload Timeout	0: Normal 1: Abnormal	Unsigned int	2	1	/
0x03	10139	Inverter Overtemperature	0: Normal 1: High	Unsigned int	2	1	/
0x03	10140	Inverter Protect	0: Normal 1: Abnormal	Unsigned int	2	1	/
0x03	10141	Manual Shutdown	0: Normal 1: Shutdown	Unsigned int	2	1	/
0x03	10142	Battery Relay Status	0: Battery relay open 1: Battery relay closed	Unsigned int	2	1	/
0x03	10143	Reserved					
0x03	10144	Reserved					
0x03	10145	Reserved					
0x03	10146	Reserved					
0x03	10147	Reserved					
0x03	10148	Reserved					
0x03	10149	Reserved					