ES3M-100S Display Map



Note: The numbers in the 'Page' column of the display map tables below correspond to the page numbers shown in the upper-left corner of the device display (the area marked with a red circle in the figure). Each entry describes the measurement parameter or information shown on the corresponding display page. To identify the displayed information, locate the page number in the relevant table.

Measurement and Energy Displays (Pages 1–19)

Page	Display content	Display description
1	Total active energy	Display: 6+2 (7+1) digit (kWh)
2	Forward active energy	Display: 6+2 (7+1) digit (kWh)
3	Reverse active energy	With '–' sign; display: 5+2 (6+1) (7) digit (kWh)
4	Total reactive energy	Display: 6+2 (7+1) digit (kvarh)
5	Forward reactive energy	Display: 6+2 (7+1) digit (kvarh)
6	Reverse reactive energy	With '–' sign; display: 5+2 (6+1) (7) digit (kvarh)
7	First-quadrant reactive energy	Display: 6+2 (7+1) digit (kvarh)
8	Second-quadrant reactive energy	Display: 6+2 (7+1) digit (kvarh)
9	Third-quadrant reactive energy	Display: 6+2 (7+1) digit (kvarh)
10	Fourth-quadrant reactive energy	Display: 6+2 (7+1) digit (kvarh)
11	Resettable active energy	Display: 6+2 (7+1) digit (kWh)
12	Forward resettable active energy	Display: 6+2 (7+1) digit (kWh)
13	Reverse resettable active energy	With '–' sign; display: 5+2 (6+1) (7) digit (kWh)
14	Resettable reactive energy	Display: 6+2 (7+1) digit (kvarh)
15	Forward resettable reactive energy	Display: 6+2 (7+1) digit (kvarh)
16	Reverse resettable reactive energy	With '–' sign; display: 5+2 (6+1) (7) digit (kvarh)
17	Maximum active demand	Display: 6+2 (7+1) digit (W)
18	Forward maximum active demand	Display: 6+2 (7+1) digit (W)
19	Reverse maximum active demand	With '–' sign; display: 5+2 (6+1) (7) digit (W)

Measurement and Energy Displays (Pages 20–51)

Page	Display content	Display description
20	Maximum reactive demand	Display: 6+2 (7+1) digit (var)
21	Forward maximum reactive demand	Display: 6+2 (7+1) digit (var)
22	Reverse maximum reactive demand	With '–' sign; display: 5+2 (6+1) (7) digit (var)
23	L1-N voltage	Display: 3+2 digit (V)
24	L2-N voltage	Display: 3+2 digit (V)
25	L3-N voltage	Display: 3+2 digit (V)
26	L1-L2 line voltage	Display: 3+2 digit (V)
27	L2-L3 line voltage	Display: 3+2 digit (V)
28	L3-L1 line voltage	Display: 3+2 digit (V)
29	L1 phase current	Reverse direction indicated by '–'; display: 3+3 digit (A)
30	L2 phase current	Reverse direction indicated by '–'; display: 3+3 digit (A)
31	L3 phase current	Reverse direction indicated by '–'; display: 3+3 digit (A)
32	Total active power	Reverse direction indicated by '–'; display: 2+3 digit (kW)
33	L1 active power	Reverse direction indicated by '–'; display: 2+3 digit (kW)
34	L2 active power	Reverse direction indicated by '–'; display: 2+3 digit (kW)
35	L3 active power	Reverse direction indicated by '–'; display: 2+3 digit (kW)
36	Total reactive power	Reverse direction indicated by '–'; display: 2+3 digit (kvar)
37	L1 reactive power	Reverse direction indicated by '–'; display: 2+3 digit (kvar)
38	L2 reactive power	Reverse direction indicated by '–'; display: 2+3 digit (kvar)
39	L3 reactive power	Reverse direction indicated by '–'; display: 2+3 digit (kvar)
40	Total apparent power	Display: 2+3 digit (kVA)
41	L1 apparent power	Display: 2+3 digit (kVA)
42	L2 apparent power	Display: 2+3 digit (kVA)
43	L3 apparent power	Display: 2+3 digit (kVA)
44	Total frequency	Display: 2+1 digit (Hz)
45	L1 frequency	Display: 2+1 digit (Hz)
46	L2 frequency	Display: 2+1 digit (Hz)
47	L3 frequency	Display: 2+1 digit (Hz)
48	Total power factor	Capacitive: 'C'; inductive: 'L'; '–' sign based on active power direction; display: 1+3 digit
49	L1 power factor	Capacitive: 'C'; inductive: 'L'; '–' sign based on active power direction; display: 1+3 digit
50	L2 power factor	Capacitive: 'C'; inductive: 'L'; '–' sign based on active power direction; display: 1+3 digit
51	L3 power factor	Capacitive: 'C'; inductive: 'L'; '–' sign based on active power direction; display: 1+3 digit

Per-Phase Energy Displays (L1 / L2 / L3)

Page numbers 1–22 are displayed separately for each phase.

L1 Energy		L2 Energy		L3 Energy	
Page	Display content	Page	Display content	Page	Display content
1	Total active energy	1	Total active energy	1	Total active energy
2	Forward active energy	2	Forward active energy	2	Forward active energy
3	Reverse active energy	3	Reverse active energy	3	Reverse active energy
4	Total reactive energy	4	Total reactive energy	4	Total reactive energy
5	Forward reactive energy	5	Forward reactive energy	5	Forward reactive energy
6	Reverse reactive energy	6	Reverse reactive energy	6	Reverse reactive energy
7	First-quadrant reactive energy	7	First-quadrant reactive energy	7	First-quadrant reactive energy
8	Second-quadrant reactive energy	8	Second-quadrant reactive energy	8	Second-quadrant reactive energy
9	Third-quadrant reactive energy	9	Third-quadrant reactive energy	9	Third-quadrant reactive energy
10	Fourth-quadrant reactive energy	10	Fourth-quadrant reactive energy	10	Fourth-quadrant reactive energy
11	Resettable active energy	11	Resettable active energy	11	Resettable active energy
12	Forward resettable active energy	12	Forward resettable active energy	12	Forward resettable active energy
13	Reverse resettable active energy	13	Reverse resettable active energy	13	Reverse resettable active energy
14	Resettable reactive energy	14	Resettable reactive energy	14	Resettable reactive energy
15	Forward resettable reactive energy	15	Forward resettable reactive energy	15	Forward resettable reactive energy
16	Reverse resettable reactive energy	16	Reverse resettable reactive energy	16	Reverse resettable reactive energy
17	Maximum active demand	17	Maximum active demand	17	Maximum active demand
18	Forward maximum active demand	18	Forward maximum active demand	18	Forward maximum active demand
19	Reverse maximum active demand	19	Reverse maximum active demand	19	Reverse maximum active demand
20	Maximum reactive demand	20	Maximum reactive demand	20	Maximum reactive demand
21	Forward maximum reactive demand	21	Forward maximum reactive demand	21	Forward maximum reactive demand
22	Reverse maximum reactive demand	22	Reverse maximum reactive demand	22	Reverse maximum reactive demand

Information Displays

Page	Display content	Display description
1	Serial number	12 digit; 000000000000
2	Modbus ID	1–247
3	Baud rate	9600 / 19200 / 38400 / 115200
4	Parity	Odd / Even / None
5	Stop bit	1 or 2 bit
6	Automatic display scroll time	5–99 seconds; 0 disables automatic scrolling.
7	Combination code	1 = Total = Forward 2 = Total = Reverse 3 = Total = Forward + Reverse 4 = Total = Forward – Reverse
8	Demand type and period	Type 0 = Fixed interval (Interval); Type 1 = Sliding interval (Slip); period: 1–30 minutes
9	SO output	800, 1000, 1600, etc.; values greater than 100 that divide 96000 evenly
10	Date	Day/Month/Year (DDMMYY)
11	Time	Hour/Minute/Second (HHMMSS)
12	Software version number	U301
13	Checksum	XXXX

Setting Displays

Page	Display content	Display description	Action note
1	Modbus ID	1–247	To enter the correct password, press and hold the right arrow button for more than 3 seconds.
2	Baud rate	9600 / 19200 / 38400 / 115200	
3	Parity	Odd / Even / None	
4	Stop bit	1 or 2 bit	
5	Automatic display scroll time	5–99 seconds; 0 disables automatic scrolling.	
6	Combination code	1 = Total = Forward 2 = Total = Reverse 3 = Total = Forward + Reverse 4 = Total = Forward – Reverse	
7	Demand type and period	Type 0 = Fixed interval (Interval); Type 1 = Sliding interval (Slip); period: 1–30 minutes	
8	SO constant	800, 1000, 1600, etc.; values greater than 100 that divide 96000 evenly	
9	Date	Day/Month/Year (DDMMYY)	
10	Time	Hour/Minute/Second (HHMMSS)	
11	Reset resettable active energy	After a long press, select and reset the total and per-phase values (total, forward and reverse).	
12	Reset resettable reactive energy	After a long press, select and reset the total and per-phase values (total, forward and reverse).	
13	Reset maximum active demand	After a long press, select and reset the total and per-phase values (total, forward and reverse).	
14	Reset maximum reactive demand	After a long press, select and reset the total and per-phase values (total, forward and reverse).	
15	Password	4 bit	
16	Exit	Exit the settings menu	