

6. TECHNICAL CHARACTERISTICS OF SINGLE PHASE METER :

- | | | |
|-------------------------|---|-------------------------------------------------------------------------------------|
| 1. Enclosure | : | Engineering plastic |
| 2. Display | : | Backlit LCD display, Large digit size 10 x 5mm |
| 3. Protection Index | : | IP51 |
| 4. System | : | ac 1 Phase, 2 Wire |
| 5. Inputs | : | a. Current
Basic Current : 5A, Maximum Current : 30A
Starting Current : 10 mA |
| | | b. Voltage
Rated : 240V
Variation : -40% to +20% |
| 6. Class of Accuracy | : | Class 1.0 |
| 7. Applicable Standards | : | IS13779 : 99, CBIP Technical Report 88 |
| 8. Power Consumption | : | <1W/4VA for voltage circuit. |



HPL ELECTRIC & POWER LTD.

1/20, Asaf Ali Road, New Delhi -110002, Phone : 91-11-23234411, 23234811
Fax: 91-11-23232639, Email: hpl@hplindia.com, Website: www.hplindia.com
Due to continuous development, specifications and features are subject to change without prior notice.

Note: In case of magnet occurrence, magnet date & time will be available in above display screens.




The display screen 42 to 44 shall be as follows:

42. Last Magnet Occurrence Type	* 2 t
43. Last Magnet Occurrence Date	* 10.06.21 dt
44. Last Magnet Occurrence Time	* 09:00 t

Note: In case cover is opened, Icon c-open will be available in above display screens. The display screen 42 & 43 shall be as follows.

42. Cover Opening (Event) Date	10.02.21 dt C-OPEN
43. Cover Opening (Event) Time	09:00 t C-OPEN

Note: Icons used for different Tamperers are as follows :

- i. Magnetic Tamper (If not immune) : 
- ii. Earth Tampering : 
- iii. Neutral Missing Tampering : NM
- iv. Exporting Energy : 
- v. Meter Cover Open : C-OPEN

5. COMMUNICATION Following parameters are downloaded from meter (Through optical port) using CMRI & can be viewed for further analysis using BCS.

1. Instantaneous Data.
2. Events Details.
3. History of Last Twelve Months.
4. Power ON/OFF Events (If Power OFF time duration is more than 5 min. then power OFF/ON Events shall be saved.
5. Load Survey of Last 60 Days.

C. DISPLAY IN ABSENCE OF POWER :

All Auto Scroll Parameters shall be displayed in Battery Mode in the absence of power by pressing the Push Button.

6. TECHNICAL CHARACTERISTICS OF SINGLE PHASE METER :

- 1. Enclosure : Engineering plastic
- 2. Display : Backlit LCD display, Large digit size 10 x 5mm
- 3. Protection Index : IP51
- 4. System : ac 1 Phase, 2 Wire
- 5. Inputs : a. Current
Basic Current : 5A, Maximum Current : 30A
Starting Current : 10 mA
b. Voltage
Rated : 240V
Variation : -40% to +20%
- 6. Class of Accuracy : Class 1.0
- 7. Applicable Standards : IS13779 : 99, CBIP Technical Report 88
- 8. Power Consumption : <1W/4VA for voltage circuit.

GCPK4SP-BES-WC-OC Rev-1 (PE04-351)



HPL ELECTRIC & POWER LTD.

1/20, Asaf Ali Road, New Delhi -110002, Phone : 91-11-23234411, 23234811
 Fax: 91-11-23232639, Email: hpl@hplindia.com, Website: www.hplindia.com
 Due to continuous development, specification and features are subject to change without prior notice.

OPERATION AND INSTRUCTION MANUAL

ac, 1Phase, 2Wire, 5-30A, 240V, Static Energy Meter

1. INSTALLATION :

- a. Connect the meter as per wiring diagram on terminal cover of the meter.
- b. Ensure that cable connections are properly tightened.



2. FRONT VIEW :

3. OPERATION : As soon as the meter is powered up, it performs the LCD segment check and then goes in auto scroll mode of display.

4. DISPLAY : There are three modes of display.

- a. Auto Scroll Mode
- b. Push Button Mode
- c. Battery Mode

a. AUTO SCROLL MODE : Each parameters shall be on meter display for the 10 sec. and the time between two auto cycles shall be 120 seconds.

Auto Scroll Mode Parameters	Typical Screen Shots
1. LCD Segment Check	* NET IMPORT EXPORT ← NM → BP C-OPEN 8888.88 88
2. Real Time	* 11:05:09 t
3. Real Date	* 02.09.21 dt
4. Cumulative kWh Import	* IMPORT 18 kWh
5. Cumulative kWh Export	* EXPORT 13 kWh
6. Last Month Active Energy in kWh Import	* IMPORT 18 kWh
7. Last Month Active Energy in kWh Export	* EXPORT 13 kWh
8. Instantaneous Active Power in kW	* 2.400 kW
9. Last Month MD kW Import	* IMPORT 1.01 kW MD
10. Last Month MD kW Export	* EXPORT 1.01 kW MD
11. Last Month Average PF Import	* PF 1.00
12. Last Month Average PF Export	* PF 1.00

13. Billing Period Count	*	1 bC
14. Cumulative Tamper Count	*	11 tC

b. PUSH BUTTON MODE: The display with push button shall be auto off type after completion of display cycle and will revert back to normal auto scroll reading after approximately 10 seconds.

Push Button Mode Parameters	Typical Screen Shots	
1. LCD Segment Check	*	NET IMPORT EXPORT ← IN → BP C-OPEN TOO MD KVAH 88.88.88.88
2. Meter Serial No.	*	123456 78
3. Real Time	*	11.25.33 t _n
4. Real Date	*	02.09.21 d _t
5. Instantaneous Voltage	*	240.0 V
6. Instantaneous Phase Current	*	5.0 A _{PH}
7. Cumulative kWh Import	*	IMPORT 18 kWh
8. Cumulative kWh Export	*	EXPORT 13 kWh
9. Last Month Active Energy in kWh Import	*	IMPORT 18 kWh ₁
10. Last Month Active Energy in kWh Export	*	EXPORT 13 kWh ₁
11. Last Month MD kW Import	*	IMPORT 10.1 kW _{MD} ₁
12. Last Month MD kW Export	*	EXPORT 10.1 kW _{MD} ₁
13. Frequency	*	F 49.5 Hz
14. Power Factor	*	PF 1.00
15. Instantaneous Neutral Current	*	5.0 nA
16. Last Month Active Energy in kWh Import	*	IMPORT 18 kWh ₁
17. 2nd Last Month Active Energy in kWh Import	*	IMPORT 17 kWh ₂
18. 3rd Last Month Active Energy in kWh Import	*	IMPORT 15 kWh ₃
19. 4th Last Month Active Energy in kWh Import	*	IMPORT 12 kWh ₄

20. 5th Last Month Active Energy in kWh Import	*	IMPORT 10 kWh ₅
21. 6th Last Month Active Energy in kWh Import	*	IMPORT 8 kWh ₆
22. Last Month Active Energy in kWh Export	*	EXPORT 13 kWh ₁
23. 2nd Last Month Active Energy in kWh Export	*	EXPORT 12 kWh ₂
24. 3rd Last Month Active Energy in kWh Export	*	EXPORT 10 kWh ₃
25. 4th Last Month Active Energy in kWh Export	*	EXPORT 8 kWh ₄
26. 5th Last Month Active Energy in kWh Export	*	EXPORT 6 kWh ₅
27. 6th Last Month Active Energy in kWh Export	*	EXPORT 3 kWh ₆
28. Last Month Average PF Import	*	IMPORT PF 1.00 ₁
29. 2nd Last Month Average PF Import	*	IMPORT PF 0.99 ₂
30. 3rd Last Month Average PF Import	*	IMPORT PF 0.99 ₃
31. 4th Last Month Average PF Import	*	IMPORT PF 1.00 ₄
32. 5th Last Month Average PF Import	*	IMPORT PF 0.99 ₅
33. 6th Last Month Average PF Import	*	IMPORT PF 1.00 ₆
34. Last Month Average PF Export	*	EXPORT PF 0.99 ₁
35. 2nd Last Month Average PF Export	*	EXPORT PF 1.00 ₂
36. 3rd Last Month Average PF Export	*	EXPORT PF 0.99 ₃
37. 4th Last Month Average PF Export	*	EXPORT PF 0.99 ₄
38. 5th Last Month Average PF Export	*	EXPORT PF 1.00 ₅
39. 6th Last Month Average PF Export	*	EXPORT PF 0.99 ₆
40. High Resolution kWh Import	*	IMPORT 00 18.21 kWh ₉₉
41. High Resolution kWh Export	*	EXPORT 00 13.21 kWh ₄₄