

# **User Manual**



# Multifunction Meter JEO2519

# www.enerjeometers.com



### 1. FEATURES

- Real true RMS measurements.
- Simultaneous sampling of voltage and current.
- Aux voltage Input: 80 to 300V AC/DC.
- Accuracy class: Class1 as per standard IEC 62053-21.
- 1Row alpha numeric multi-colour LCD display 10mm height, with unique look.
- LCD display with 4 Digits for instantaneous, 7 Digits for Energy parameter. .
- On-site setup for wiring configuration: STAR and DELTA.
- Auto Scaling of Decimal point.
- Front LED pulse 16000 imp/KWh for 5A.
- Dynamic communication User selectable address with selectable Parameters.
- Voltage and Current Phase angle measurement in the communication.
- Energy resetting at 99999999 KVAh\*MF.
- Optional RS485 Communication

Programmable CT & PT Ratio and User programmable password protection.
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# 2.1 Key Indication

Key	In Setup Mode	In Run Mode
<b>△</b> Up	To select the value and accept the value	To Scroll the pages
Down	To edit the value	To Scroll the pages

#### 2.2 Display Parameter

Parameter	Meaning
К	Kilo
М	Mega
KM	Giga
LL with V	Average Voltage Line to Line
Ln with V	Average voltage Line to Neutral
А	Average Amps
F	Frequency
V with 12	Voltage Line to line RY phase
V with 23	Voltage Line to line YB phase
V with 31	Voltage Line to line BR phase
V1 with L1	Voltage Line to Neutral R Phase
V2 with L2	Voltage Line to Neutral Y Phase
V3 with L3	Voltage Line to Neutral B Phase

A1 with L1	
AT WITH LT	Current R Phase
A2 with L2	Current Y Phase
A3 with L3	Current B Phase
Wh	Active Energy Import

## 3. PROGRAMMING MODE

#### 3.1 Setup Procedure

- Press the UP & Down together to enter setup, display shows TTTTT 5 F
- Enter Password(default -1000). Blinking of digits indicate editing is possible.
- Press Down to decrement value from 9 to 1.
- · Press Up to move to the next digit till 4th digit.
- . If Password is correct, editing is possible and meter displays CLr.I
- · Press down key to enter setup and Up key to enter clear mode. Refer 3.2 and 3.3.

#### Setup mode

- Press Up to view the parameter option/ value.
- Again press Up key to select and edit parameter value/ option.
- Press Down to decrement values or to select from available options.
- · Press Up to move to the next digit till 4th digit.
- Press Up to save the option/ value parameter
- Press Down to edit next parameter till end of last parameter. Refer 3.4

#### 3.2 Clear Mode: Clear Integrator

Press <b>UP</b> Key	Meter displays CLr.	Meter displays CLr . M
Press <b>Down</b> Key	Displays CLr.I 'n' options can be changed by pressing <b>Down</b> Key. Display will prompt to 'y' (or) 'n' while pressing <b>Down</b> Key.	Option : (YES)/(NO) 'y'(for clearing) 'n' (for not clearing)
Press <b>UP</b> Key to accept the edited option	Comes back to Default page (Clear Mode ends here)	

#### 3.3 Display Setup

Action	Option / Range
StAr EL	Options: Star/Delta.
415.0 P.P	PT Primary (Range: 50V to 999K V)
415.0 P.S	PT Secondary (Range: 50V to 600 V)
5.000 C.P	CT Primary (Range: 0.5A to 99K A)
5.000 C.S	CT Secondary (Range: 0.5A to 6A)
9600. bA	Baud rate (Options: 4800/9600/19200/38400)
EUEn Pr	Parity (Options: Odd/Even/None)
1.000 dU	Device ID (Range: 1 to 125)
PW	Password (Range: 1000 to 9999)
rESL E.S	Energy selection (Option: resolution/Counter)
SAUE y	Save (Option: Yes/No)
	StAr EL 415.0 P.P 415.0 P.S 5.000 C.P 5.000 C.S 9600. bA EUEn Pr 1.000 dU PW rESL E.S

#### 3.4 Enabling and Disabling Auto Scrolling

Press DOWN/UP key for 5 secs. Display shows:

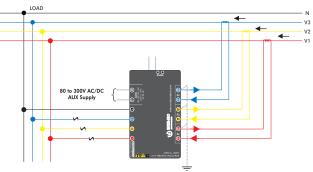
Now display will start to scroll all parameters automatically every 5 seconds.

Again press any key to disable auto scrolling. Display shows:

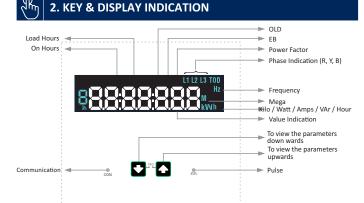


#### 4. WIRING DIAGRAM

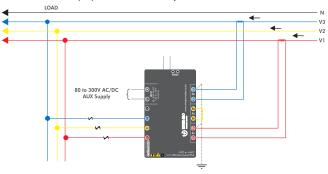
#### Star Connection (3E) 3 Phase 4 Wire system



\* Note Fuse rating 500mA Slow blow fuse. NOTE: For DC Aux Voltage, +/- ve can be connected anyway.



#### Delta Connection (2E) 3 Phase 3 Wire system

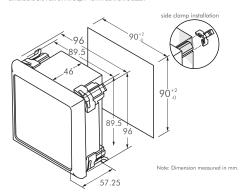


\* Note: Wiring should be in accordance with the national electrical code and/or the Canadian Electrical Code, part I.



#### 6. MECHANICAL SPECIFICATION

Mounting: The front bezel of the basic model is molded plastic. Bezel dimensions are 96x96mm. Depth 46mm behind the bezel.





## 7.TROUBLESHOOTING

- Meter display does not turn ON: Check that there is power supply applied on AUX supply terminals. Check fuse connection (Use fuse connection of specified ranges).
- Voltage or current readings are incorrect: Make sure connection mode (star/delta) is properly programmed. Check that the voltage and current ratios are properly configured. Check the output of the CT's and PT's being used.
- PT reading is incorrect / Active Power reading is negative: CT connections may be reversed, check and correct CT connections. Check Voltage and current phases are connected in proper sequence
- RS485 communication does not work: Check baud rate & parity maintained in the
  connected computers is same as meter. Memory mapping in software is correct.
  Check device ID of meter is unique & properly maintained. Check converter is
  working properly. Check all communications wiring is complete. Check that the number
  of data bits is set to 8, with one stop bit and even parity.



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