

Billion SG3110 Compact Smart Meter

The Billion SG3110 is designed for general single phase or poly phase power measurement and it has the wide range of metering. It can be applied either on low voltage primary side or medium/high voltage secondary side for its high accuracy (<1%, IEC62053-21) under 5A current. The Billion SG3110 is equipped with clip-on CT and standard communication interfaces. Its compact size, cost-effective and easy-installation features make the Billion SG3110 ideal for the modern electricity monitoring and load investigation.

- True RMS energy and power parameters measurement in compact size
- Clip-on CT, easy wiring for on-line installation
- RS485 communication interface supports Modbus protocol
- Wh accuracy better than 0.5% (pf =1)
- Support Lon Talks (option)
- Wide range of measurement with various size of CT, up to 200A (24Φmm)

Certificate

1. LVD Test Report: EN61010-1

2. CE Test Report:

EN61326 Conducted Emission	EN61000-4-4 Electrical Fast Transient/Burst
EN61326 Radiated Emission	EN61000-4-5 Surge
EN61000-3-2 Harmonic Current Emission	EN61000-4-6 Conducted Susceptibility
EN61000-3-3 Voltage Fluctuation & Flicker	EN61000-4-8 Power Frequency magnetic Field
EN61000-4-2 Electrostatic Discharge	EN61000-4-11 Voltage Dips and Interruption
EN61000-4-3 Radiated Susceptibility	

3. FCC Test Report: Class A and CISPR 22

Specifications

Battery

- LiSOC12, 950 mAh for RTC

Input V

- Billion SG3110-34: 10-300V
- Billion SG3110-33: 10-500V

Input I

- CT Φ 10mm (60A), CT Φ 16mm (100A), CT Φ 24mm (200A)

Aux Power

- DC 10-30V

Frequency

- 60/50Hz

Starting I

- <0.025A

Wiring diagram

- Billion SG3110-34: 1-phase 4-channel

Power

- Billion SG3110-33: Auto or manual setting 1P2W-1CT, 1P3W-2CT, 3P3W-2CT, 3P3W-3CT, 3P4W

Communication

- RS485, half duplex isolated
- Baud Rate: 9600, 19200(default), 38400
- Protocol: Modbus
- LonTalks: FTT10 (option)

Parameters

- Billion SG3110-34:
 - V1, V1, V2, V2
 - I 1, I 2, I 3, I 4
 - kW1, kW2, kW3, kW4
 - kVA1, kVA2, kVA3, kVA4
 - kvar1, kvar2, kvar3, kvar4
 - PF1, PF2, PF3, PF4
 - kWh1, kWh2, kWh3, kWh4
 - kVAh1, kVAh2, kVAh3, kVAh4
 - kvarh1, kvarh2, kvarh3, kvarh4
- Billion SG3110-33:
 - VA, VB, VC, Vave
 - IA, IB, IC, Iave
 - kWA, kWb, kWc, kWtot
 - kVAA, kVAB, kVAC, kVAtot
 - kvarA, kvarB, kvarC, kvartot
 - PFA, PFB, PFC, PFtot
 - kWhA, kWhB, kWhC, kWhTot
 - kVAhA, kVAhB, kVAhC, kVAhtot
 - kvarhA, kvarhB, kvarhC, kvarhtot

kWh Accuracy

- LonTalks: (option)
- 0.5% (PF=1), better than IEC62053-21

Size

- 78(L) × 35(W) × 99(H) mm

Operation Temperature

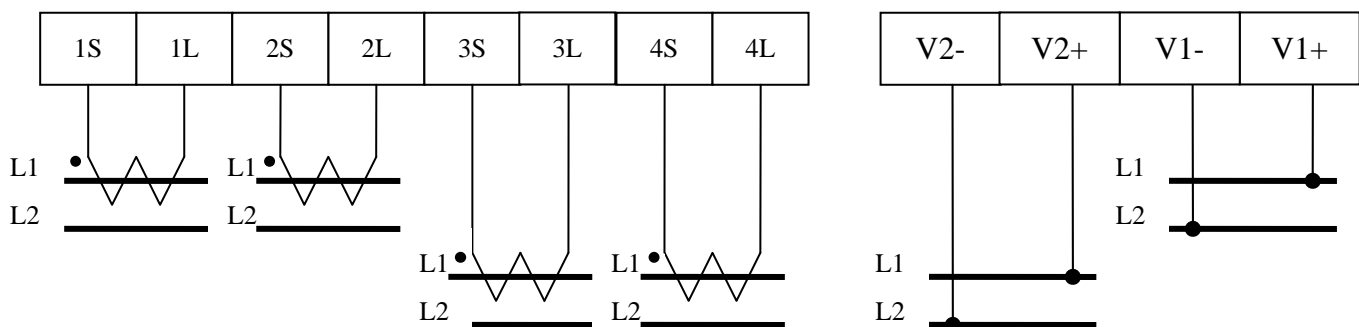
- -10°C ~ 70 °C

Installation

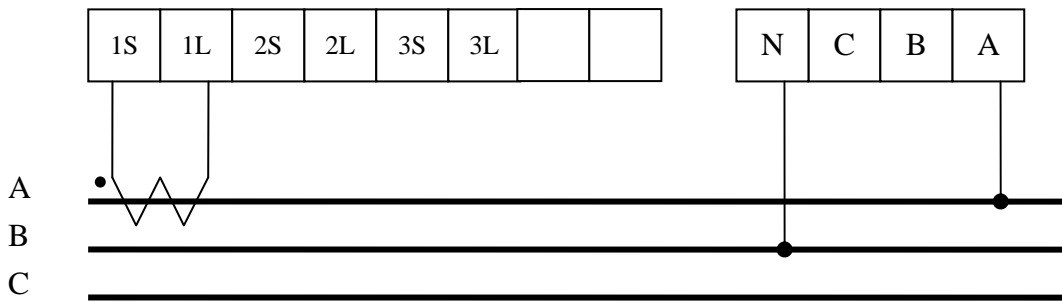
- Rail-mounted

Wiring Diagram

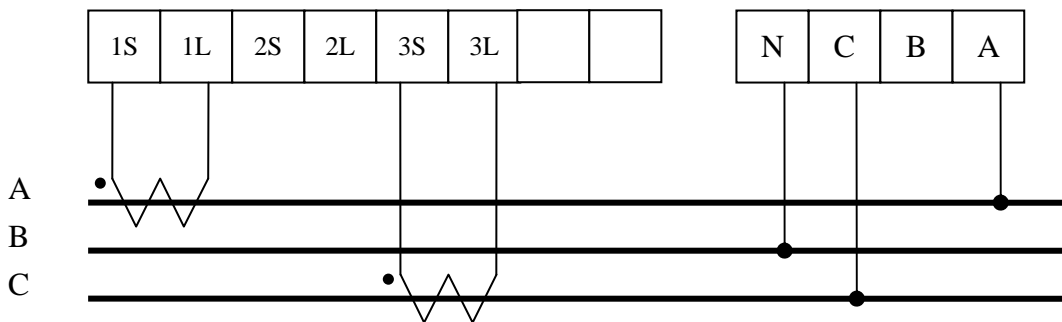
● 1P4W (Billion SG3110-34)



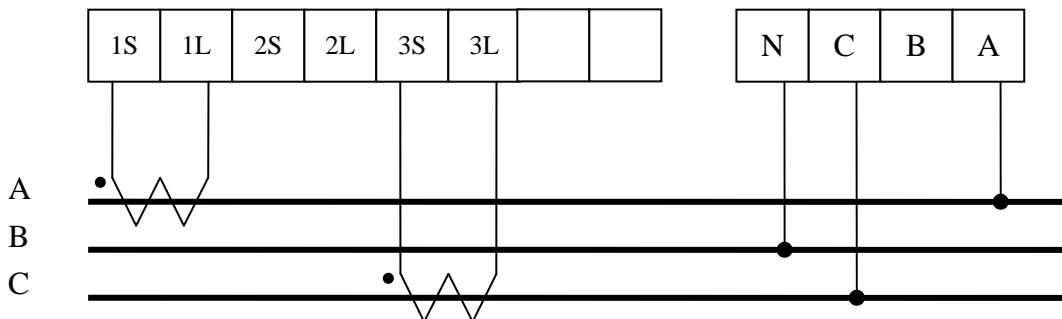
● **1P2W -1CT (Billion SG3110-33)**



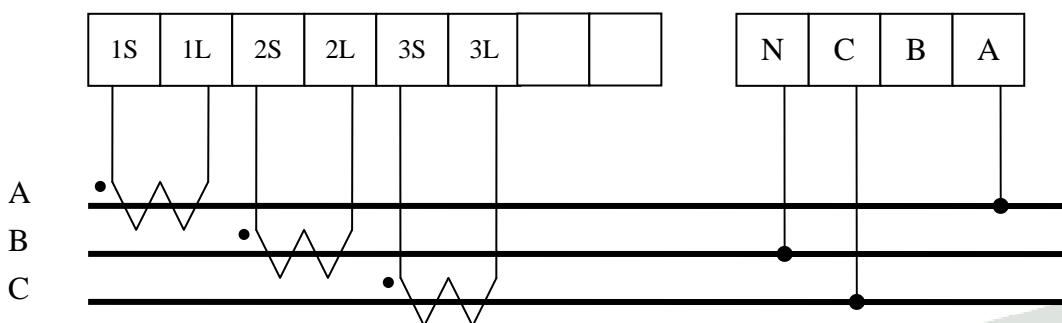
● **1P3W-2CT (Billion SG3110-33)**



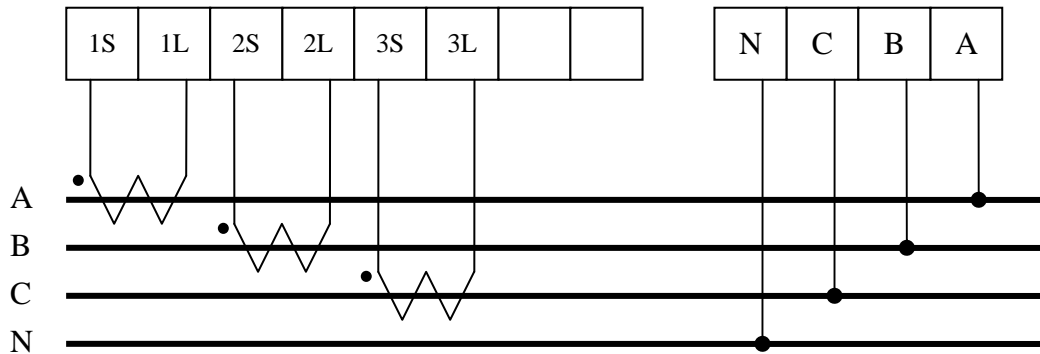
● **3P3W-2CT (Billion SG3110-33)**



● **3P3W-3CT (Billion SG3110-33)**



● **3P4W-3CT (Billion SG3110-33)**



Ordering Code

SG3110-3x----x x

Model _____

4: 1 phase 4 channel
3: 3 phase

CT Size _____

0: CTΦ10mm (standard)
1: CTΦ16mm (option)
2: CTΦ24mm (option)

Secondary Communication-port _____

0: No secondary port
1: Lontalks

V.03012010

Notes:
Specifications in this datasheet are subject to change without prior notice.