A-ES QUICK INSTALLATION INSTRUCTIONS
**A** Installation space

- Upward: 500 mm
- Downward: 300 mm
- Front: 300 mm
- Both sides: 200 mm

**B** Dimensions for drilling holes

- 70 mm x 70 mm
- 110 mm x 120 mm
- 120 mm x 120 mm
- 150 mm x 150 mm

**C** Fix the wall bracket

- Wall-mounted bracket
- Expansion bolts

**D** Install the inverter

**E** Fasten screws

**F** Inverter could be locked for anti-theft
**Wire Conduit Plugs Connection**

**PV cable assembly and connection**
- Max 5.6mm
- 90°C wire, 12AWG copper

**Battery cable assembly and connection**
- Max 7.4mm
- 90°C wire, 6AWG copper

**Auto-transformer cable assembly and connection**
- Max 7.4mm
- 90°C wire, 8-10AWG copper

**On-grid cable assembly and connection**
- Max 7.4mm
- 90°C wire, 8-10AWG copper

**Back-up cable assembly and connection**
- Max 7.4mm
- 90°C wire, 8-10AWG copper

**Battery BMS connection**
- 22 AWG, 600V insulated

For CAN1 battery, for example BYD, please connect BMS cables to CAN1 terminals.

For LG battery, please connect BMS cables to 485-1 terminals and connect enable signal cables to LG_EN+ & LG_EN-.
WIRING SYSTEM FOR A-ES SERIES INVERTER

Auto-transformer Connection (Optional)

A Installation space

- Upward: 300mm
- Downward: 300mm
- Front: 200mm
- Both sides: 100mm

B Fix the wall bracket

- Wall-mounted bracket
- Expansion bolts
- Self-tapping Screws

C Installation the auto-transformer

D Auto-transformer connection

- Plug the WiFi module into the WiFi terminal.
- Auto-transformer connection
- Fix the wall bracket
- Installation the auto-transformer
- Auto-transformer connection

E Installation space

- Upward: 300mm
- Downward: 300mm
- Front: 200mm
- Both sides: 100mm

F Expansion bolts

G Wall-mounted bracket

H Self-tapping Screws

I Auto-transformer connection

J WiFi module
Wiring Box Of GoodWe AES Series Hybrid Inverter

L1 L2 N

T1 T2

Back-up Loads
Division Panel

L1 L2 N

L1 L2 N

Back-up Panel
Main Breaker

Neutral Bus-bar

Back-up Panel
Loads Breakers

To Utility Meter

240V

Back-up Loads

120V

To Back-up Loads

Auto-transformer

PV Array

Battery

Auto-transformer Temp. sense [T1, T2]

AC Transformer [L1, N, L2], 90℃, 8-10 AWG

AC Back-up [L1, N, L2], 90℃, 8-10 AWG

AC Grid [L1, N, L2], 90℃, 8-10 AWG

BMS Cable

te22AWG (20~24 AWG), 600V insulated

Note 1: The rated current of the circuit breaker depends on the load power.

Note 2: The Max continuous output current Per Phase @ 120 V is 40A.

Note 3: The back-up Output L1 or L2 Max continuous current carrying capacity > 40A

System Connection Diagram

Two Meter CTs

PV+, PV-, 90℃, 12 AWG

Ground Bus-bar

50A CB

20A CB

20A CB

20A CB

20A CB

50A CB

Note 1: The thickness of the cable depends on the load power.

Note 2: The max. continuous output current per phase @ 120 V is 40A.

Note 3: The back-up output L1 or L2 max continuous current carrying capacity > 40A.