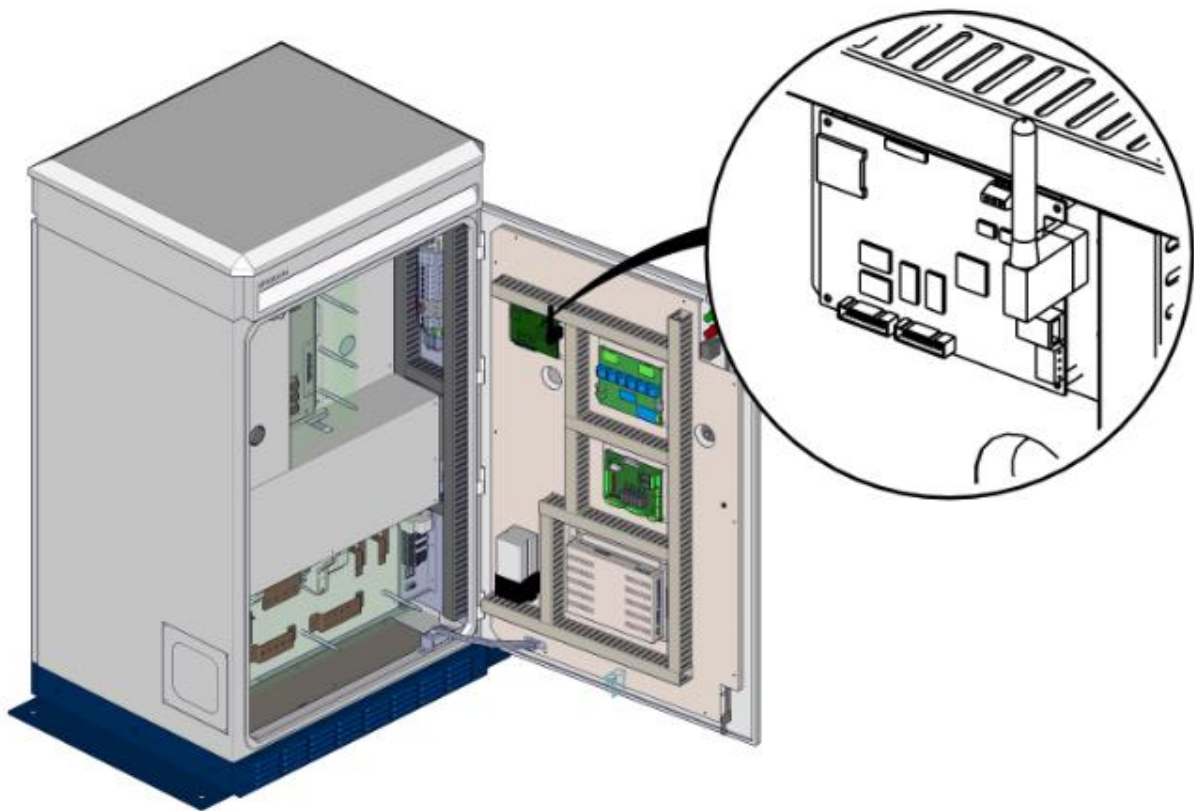# HMI (A5T_HMI) Manual

■ English Version

The HMI has a graphic interface which you use to monitor and control the inverter.
The LCD screen displays the operating states, along with voltages, currents, frequencies, temperatures, output powers, status of errors/warning messages, and events.
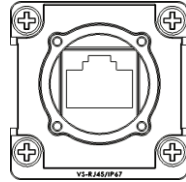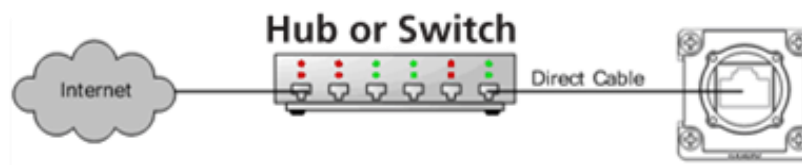
1. HMI Installation

> *Note*
>
> *The antenna has been molded. So if the user modify the antenna arbitrarily, antenna would be broken.*
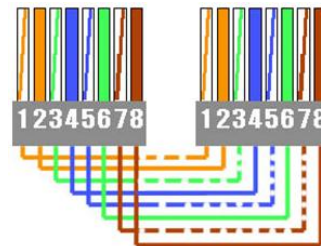
2. CONNECTING ETHERNET

Target port figure

Connect the wires

Connector Type-RJ45

Cable Type-Direct(1:1)

Note

If using a direct cable connection to a computer, please use a crossover cable.

Setting IP Address

- Get SD Card in PC
- Create a directory named 'xpnet'
- Create a file named 'eth.ini'
- Open the created file
- Input the network information in the file
- Example the inside of eth.ini

IPADDR:192.168.0.10

GATEWAYip:192.168.0.1

NETMASK:255.255.255.0

WEBPORT:80

END

- Get SD Card in HMI
- Boot

Setting Wi-Fi

- Get SD Card in PC
- Create a directory named 'xpnet'
- Create a file named 'wifi.ini'
- Open the created file
- Input SSID in the file
- Example the inside of wifi.ini

SSID:XP50U_HMI

- Boot or reboot

Note

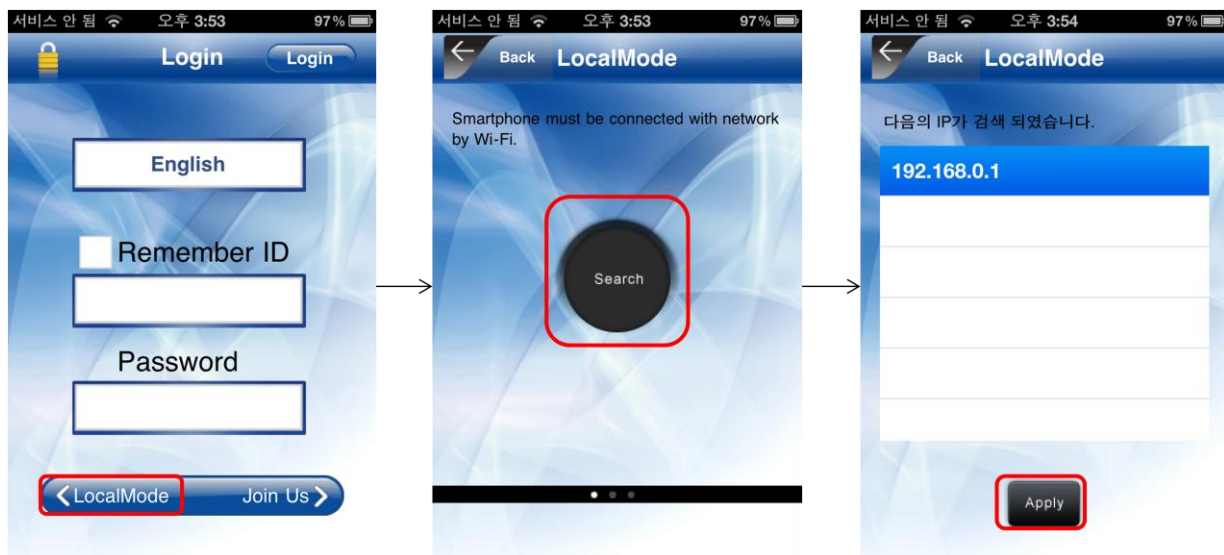*If SSID is not set in SD card, the default of SSID is 'XP50U_HMI'*

- HMI board connecting LCD

- WiFi AP setting

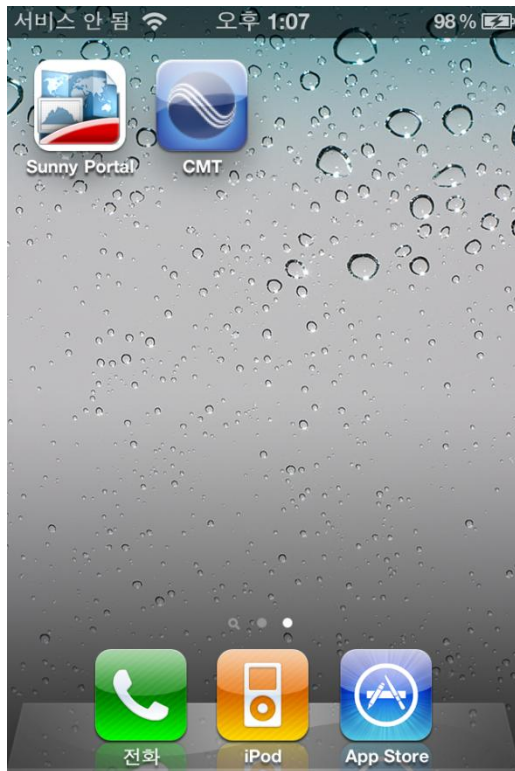## Connecting to inverter via Wifi in local

- HMI has Wifi module that can operating AP mode
- Smart Phone can connecting to HMI AP

- Icon

- Initial Screen

- Status, Function List, Statistics, Fault List

서비스 안 됨 📶 오전 11:23 83% 🔋

Plant List | **Status** | Function →

| INVERTER Description | SDN 2 KACO SOLAR-XP-HV-2.30r-2.3K-1 |

🔧 Fault   ➕ Emergency Stop

Total Yield 187.36MW
Last Month 12438.20kW
This Month 10375.10kW
Today Yield 60.40kW

서비스 안 됨 📶 오후 3:54 97% 🔋

← Status **Function**

⚙️ **Statistics** ≫

📊 **String Monitor** ≫

ℹ️ **Fault** ≫

📞 **Service** ≫

서비스 안 됨 📶 오후 1:39 100% 🔋

← Status **Statistics** Function →

3006 **2011**

Day   Month   Year

🌤️   🌙   ☀️

서비스 안 됨 📶 오후 3:55 97% 🔋

← Status **Fault** Function →

📄 Problem List

PV Polarity Failure
Fault ID: 5
Inductor or TR Over Temp.
Fault ID: 18
FAULT 19
Fault ID: 19
PEBB IGBT V Fault
Fault ID: 21
PEBB Over Temp. Analog
Fault ID: 24
PEBB Over Temp. Digital
Fault ID: 25
Grid Under Voltage

📞 **Service** ≫

3. SOFTWARE UPGRADE

HMI SW

- Get SD Card in PC

- Put Software image file into SD Card

- Change the name of the image file to 'XP50U_SW.img'

- Get SD Card in HMI

- Boot or reboot

XCU SW

- Get SD Card in PC

- Put Software image file into SD Card

- Change the name of the image file to 'XP50U_SW.hex'

- Get SD Card in HMI

- Boot or reboot

Note

The file name of HMI SW is 'XP50U_SW.img', and the file name of XCU SW is 'XP50U_SW.hex'

HMI - FCC Information

⚠ **Caution**

Exposure to Radio Frequency Radiation.
Antenna shall be mounted in such a manner to minimize the potential for human contact during normal operation. The antenna should not be contracted during operation to avoid the possibility of exceeding the FCC radio frequency exposure limit. The minimum separation distance of 20cm from the antenna to the body of user required.

This device complies with Part 15 of the FCC Results. Operation is subject to the following two conditions:

(1) This Device may not cause harmful interface, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

Note

This equipment has been tested and found to comply with the limits for CLASS B digital device, pursuant to part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try correct the interference by one or more of the following measures:

1.1. Reorient or relocate the receiving antenna.

1.2. Increase the separation between the equipment and receiver.

1.3. Connect the equipment into an outlet on a circuit different from that to which receiver is connected.

1.4. Consult the dealer or experienced radio/TV technician for help.

⚠ **Warning**

Changes or modifications not expressly approved by manufacturer could void the user's authority to operate the equipment.