Solis Firmware Update
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DSP Update

Compatible Models
Solis-1P(.7-3.6)K-M-4G
Solis-1P(2.5-6)K-4G
S5-GR1P(.7-3.6)K-M
S5-GR1P(2.5-6)K
S6-GR1P(.7-3.6)K-M
S6-GR1P(2.5-6)K
Solis-3P(3-20)K-4G
Solis-3P(5-30)K-LV
Solis-(25-50)K-5G + Plus
S5-GC3P(50-60)K
Solis-(80-110)K-5G
Solis-125K-EHV-5G
Solis-255K-EHV-5G
RAI-3K-48ES-5G
RHI-(3-5)K-48ES
RHI-(3-6)K-48ES-5G
RHI-3P(5-10)K-HVES-5G

Procedure

1. Take the files supplied to you and put them on a USB stick
    a. One file is named 20862API.bin (this file will never changes)
    b. One file is named 20862APP.bin (this is the specific file for the inverter)
        i. If the file is not named 20862APP.bin please RENAME IT.
        ii. Ensure the file is not zipped. If it is extract it.
        iii. Ensure the file is not in a folder in your USB Drive.
        iv. Ensure there are no other files in the USB Drive

For Example:

28062API.bin	30/11/2018 3:14...	BIN
28062APP.bin	30/11/2018 3:14...	BIN

2. Place the USB into the Firmware Update Tool and Place in the Inverter 4 pin Green Port.

3. The Firmware Update Tool Should Light **Red** and **Green** as seen in the picture

4. Go to the Inverter Display – Go to Advanced Settings – Password 0010 – Go to Select Turn Grid On/OFF – Turn it OFF

5. **Go to Advanced Settings – password 0010 – go to DSP Update**
6. **Verify the Version**
7. **Select Enter on DSP Update and the middle green light should start flashing**

8. **"CLICK" the button on the back up of the Firmware Update Tool**
    a. **Verify the Green light is flashing and with some inverters you will hear the fans come on.**
    b. **Verify the Green light flashes quickly and then change to a slow flash.**
        i. **Slow flashing means the inverter and the update tool have made a connection**
9. **Once the Firmware is complete, you will see the Green and Red go solid.**
    a. **If it goes dark on the Green light that means the inverter did not take the update**
    b. **If it goes dark and comes back Green after 4-5 seconds then the inverter took the firmware**
10. **Verify on DSP Update (after the Inverter LCD Operation light stops blinking) that the version changed**
11. **Go to Advanced Settings – Password 0010 – "Turn Grid On/OFF" – Turn On (If your ready to begin production)**

Troubleshooting Tips:

1. **Ensure your USB doesn't have a metal casing. This has been known to cause problems with the update.**
2. **Ensure your USB is a newer style USB and not using an old file system**
3. **Ensure your files are correct (90% of the time it's a file issue)**
4. **Ensure you do not have external communication hooked up.**
   a. **For Example, if you have an inverter with a RS485 connection and you are updating via the Green Port, there could be a communication crash and the update will become corrupted.**
5. **Ensure you have the INVERTER ADDRESS SET TO 1 (for HMI Update)**
6. **Ensure your Green port is working (verify with a voltage check of 1.7 VDC on the port. If the port is showing strange voltages the update will never work.**

Red	= +5 volts DC	= Pin 1
Black	= -5 volts DC	= Pin 2
Yellow	= +RS 485	= Pin 3
Blue	= -RS 485	= Pin 4

HMI Update

Compatible Models

Solis-1P(.7-3.6)K-M-4G
Solis-1P(2.5-6)K-4G
S5-GR1P(.7-3.6)K-M
S5-GR1P(2.5-6)K
S6-GR1P(.7-3.6)K-M
S6-GR1P(2.5-6)K
Solis-3P(3-20)K-4G
Solis-3P(5-30)K-LV
Solis-(25-50)K-5G + Plus
S5-GC3P(50-60)K
Solis-(80-110)K-5G
Solis-125K-EHV-5G
Solis-255K-EHV-5G
RAI-3K-48ES-5G
RHI-(3-5)K-48ES
RHI-(3-6)K-48ES-5G
RHI-3P(5-10)K-HVES-5G

Verify current HMI Version
Go to Advanced Setting – Password 0010 – HMI Update

- ❖ **Solis-mini-4G**   - HMI.bin ≤ 18 - HMI_WIFI.bin 30 ≥
- ❖ **Solis-Single Phase-4G**   - HMI.bin ≤ 18 - HMI_WIFI.bin 30 ≥
- ❖ **Solis-Single Phase-5G**   - HMI_WIFI.bin only
- ❖ **Solis-3P(3-20)K-4G**   - HMI.bin Only
- ❖ **Solis-3P(5-10)K-LV**   - HMI.bin Only
- ❖ **Solis-3P(15-20)K-LV**   - HMI.bin ≤ FD - HMI_WIFI.bin > FD
- ❖ **Solis-3P(25-30)K-LV**   - HMI.bin ≤ FC - HMI_WIFI.bin > FC
- ❖ **Solis-(25-50)K-5G**   - HMI.bin Only
- ❖ **Solis-(80-110)K-5G**   - HMI.bin Only
- ❖ **Solis-125K-EHV-5G**   - HMI.bin Only
- ❖ **Solis-255K-EHV-5G**   - HMI.bin Only
- ❖ **RAI-3K-48ES-5G**   - HMI.bin Only
- ❖ **RHI-(3-5)K-48ES**   - HMI.bin ≤ 15 - HMI_WIFI.bin 20 ≥
- ❖ **RHI-(3-6)K-48ES-5G**   - HMI_WIFI.bin ONLY
- ❖ **RHI-3P(5-10K-HVES-5G** - HMI.bin Only

Procedure:

1.   Take the files supplied to you and put them on a USB stick.
     a.   The only file needed is named HMI.bin or HMI_WIFI.bin - Please see chart below on how to name it.
          i.   Ensure the file is not zipped. If it is, extract it.

2.   Place the USB into the Firmware Update Tool and Place in the Inverter 4 pin Green Port.

3.   The Firmware Update Tool Should Light **Red** and **Green** as seen in the picture.
4.   Go to the Inverter Display – Go to Advanced Settings – Password 0010 – Go to Select Turn Grid On/OFF – Turn it OFF
5.   Go to Advanced Settings – password 0010 – go to HMI Update
6.   Verify no communication cables are connected. Also verify the address is set to 1.

7. Go to the Firmware update tool and push and hold the button on the back until all 3 lights are lit as shown below and then let go. **Red, Green** and **Yellow** should all be lit

8. Advanced Settings – password 0010 – go to HMI Update – Select Enter to go into Update Mode
9. Screen will go blank and the **Green** operation light will flash
10. "CLICK" the button on the back up of the Firmware Update Tool
    a. Verify the **Green** and **Yellow** lights are Flashing
    b. Verify the **Green** and **Yellow** flash quickly and then change to a slow flash
        i. Slow Flash means the inverter and the update tool have made a connection
11. Once the Firmware is complete, you will see the **Green** and **Yellow** go solid.
    c. If it goes dark on the **Green** and **Yellow** light that means the inverter did not take the update
    d. If it goes dark and comes back **Green** and **Yellow** after 4-5 seconds then the inverter took the firmware
12. Verify on HMI Update (after the Inverter LCD Operation light stops blinking) that the version changed
13. Go to Advanced Settings – Password 0010 – "Turn Grid On/OFF" – Turn On (If your ready to begin production)