

1. How and when should the so-called Night Mode be "activated" ?

Answer : If the inverter does not start in the morning when the light is low.

2. Which RCD should be used ?

Answer: Basically all our units have a RCMU (Residual Current Monitoring Unit) -> we have to use type A and at least 40 A / 100mA (30mA is too sensitive).

3. What can you set when the batteries are recharging from the mains ?

Answer: Using the "Charge Time" function in the Fox Cloud, you can specify a "time window" for the inverter to charge.

4. If I already have an existing installation and I want to have one and a new installation with batteries, what do I do ?

Answer: The customer can purchase a hybrid with a battery, in which case he also needs a second smart meter.

5. A guide to parameterising the Chint Meter .

Answer : to be found under:

<https://chintglobal.com/products/dtsu666-three-phase-din-rail-meter-8-1007>

6. When the temperature drops to 3 °C, the battery is automatically recharged from the mains to 60 % SOC, what is the reason for this ?

Answer: It is stored in the software, because otherwise batteries are damaged when the temperature drops below zero. That is why we have set an automatic "fall-back temperature" (3°C).

7. What can I do if I have created the account incorrectly or have forgotten the password ?

Answer: Unfortunately, the only option is to delete the account or create a new one.

Please contact the service department.

8. If the inverter has been recognised as defective, what is the replacement process?

Answer : If your inverter or other device does not function properly, please create a ticket under the following link: <https://support.fox-ess.com/> Please also include the serial number, pictures of the fault and connection and your address. If the device is recognised as defective, a new device will be sent to you by our logistics company. The defective unit must be returned in the original box and will be collected.

9. How do I get the Modbus registers?

Answer: If you would like to develop your own controllers (Ioxone, Homematic, etc.), you can obtain the Modbus registers by signing a so-called NDA. Please apply for this NDA at: <https://support.fox-ess.com/>. You must sign this NDA and return it to the service department. After checking, you will be provided with the appropriate Modbus register for your device.

10. Does the system do automatic updates?

Answer: We only install updates after consultation and approval by the customer. This can be done remotely via the Fox Cloud or directly on the device via a USB (Vers 2.0) stick. Automatic updates are currently not activated.

11. Which safety standard / country code do I have to set and how does it work?

Answer : For Germany low voltage please use the standard VDE ARN4105 (if PV system < 135 kw). For PV systems > 135 kw, you must set the VDE ARN 4110. For Austria please use the grid code "TOR Erzeuger Typ A" and for Switzerland please use the grid code "NAEEA- NE7-CH2020" and/or VDE ARN 4105.

12. Why does the inverter not start during commissioning?

Answer: In the settings, the unit is set to STOP at the factory; for safety reasons, this must be actively set to START. This must be done directly on the display. In the "Master-Slave" system, you must also activate the "Master" here on the display.

13. Why can't you close the whole house on the EPS connection?

Answer: This is only a "backup" function for emergency power supply. This means you should only really connect loads to it that you absolutely need in the event of a blackout. The power that can be supplied per phase ranges from 1.4 kW (H3 with 3 battery modules), up to 3.4 kW / phase (H3 with 7 battery stacks). The switching time is < 20 ms. If you want to supply the whole house with emergency power, you need an external box.

14. The battery system beeps loudly and flashes red and is not recognised by the inverter ?

Answer : If the battery worked well before, please update the system via Fox Cloud or USB. Otherwise, please check if the BMS (Battery Management System) and the slaves have the right version (See V1.0 / V2.0). And make sure that the rotary switch on the BMS is set correctly according to the number of slave modules.

15. H series: slave module count minus 1 (AIO series: battery module count minus 2) Should a DTSU666 be used in a three-phase network when using an H1-x?

Answer : In Germany, a three-phase Meter Chint DTSU 666 should always be used.

16. Can master and slave be used on one memory or should there be 2?

Answer: Only the master is connected to the batteries. The slave only serves as an energy supplier, so to speak.

17. Which interface partners will we have in 2023? **Answer :** Plexlog, Solarlog, Meteocontrol, myPV, Consollinno Which pins should be used to connect the Chint Smartmeter ?

Answer: Please refer to the manual, e.g. for H1 (pin 1 -> 25 and pin 2 -> 24) and for H3 (pin 3 -> 25, pin 4 -> 24).

18. Is a WiFi dongle included in the delivery or does it have to be ordered separately?

Answer: The Wifi dongle is included in the delivery. The LAN dongle or the 4G dongle must be ordered separately.

19. Which design tool do you recommend ?

Answer: We recommend using PV Sol (from week 15 / 2023). We will also provide our own design tool from Q3.

20. Which SoC should be set ?

Answer: We recommend setting a minimum SOC of 10 %. We recommend setting a minimum SoC (on grid) of 15% (in any case, the gap between these two values should be 5%).

21. How and where can I set the cos phi ?

Answer: You will receive a letter from your energy supplier when you agree to feed into the grid, describing the setting value of the cos phi. (e.g. - 0.9) . You can set (or change) this value in the Fox Cloud.

22. How can I update the units?

Answer: There are 2 ways to update the devices: The SW update works best via the cloud (if you have registered your device there). Otherwise, there is the possibility to update the devices via a USB stick.

23. Can I connect different string lengths to the second MPPT (dual MPP for larger units)?

Answer: No, with "Dual MPPT" strings of the same length (e.g. 18 modules or 20 modules) must always be used. With 2 MPPT, we advise the most symmetrical wiring possible, whereby different outputs are also possible.

24. When my hybrid system with battery is connected to the mains, the system sometimes recharges from the mains at night (trickle charge). How can I prevent this?

Answer: In the Fox Cloud there is a setting " Charge - Time " , where you can set how and when the unit is allowed to recharge (e.g. only from 8 am, until 8 pm).

25. At present, the total yield still totals the energy fed into the solar system together with the power generated by the battery. When will this be changed?

Answer: Yes, that's right. In the new release for the Fox Cloud we will show this

separately. (PV yield and yield from the batteries)

26. The purchase and feed-in powers in the Fox Cloud differ slightly from the measured powers from the digital meter of the grid supplier. How come?

Answer: The devices themselves, as well as the smart meter, have small measurement tolerances and measure time intervals. Certain minor deviations result from the measurement inaccuracies (power equals voltage times current).

27. If I want to change a battery module or extend my battery, what is the best way to proceed ?

Answer: Charge your existing battery tower to a SoC of 30-40 % (this is approximately the SoC at which the new slave should arrive). Then please measure the voltages at the DC (+ /-) contacts - here the voltage difference must not be greater than 0.5 V. If this is the case, you can easily add the new battery module to the battery tower and restart it (the BMS will then calibrate the entire tower).

28. How do I create a "representative" account and what does it mean?

Answer: As an installer, it is best to choose the "Agent" role. This gives you the most setting options in the Fox Cloud. You will then receive a so-called code (agent code) which you can give to the end customer during the installation when he logs into the Fox Cloud. In this way, the cloud knows which customer is assigned to which installer. This allows you to keep track of all end customer installations.

29. The cable between my hybrid inverter and the battery tower is not long enough, what can I do?

Answer: In the old version of the cable lengths, we still supplied a 1.25 m battery cable. We have now adapted this to 3 metres. This should be suitable for most applications.

30. How do I proceed if the customer wants to expand his "existing system" with grid-connected inverters with batteries?

Answer: There are 2 possibilities: You buy a hybrid inverter (H3) with batteries (incl. 2.tem SmartMeter) or you buy an AC system (so-called AC3 system).

31. What is the password for pairing the wifi module to the inverter and how do I find the inverter in the connection ?

Answer: The password for pairing is : mtmt2020 and the inverter reports with a network starting with "w". After pairing your smartphone to the inverter, you can connect to the router.

32. How can I get the warranty extensions or how long can I extend the warranty maximum ?

Answer: You can have the product warranty extended through your wholesalers. The maximum warranty period is 25 years at present.

33. Can the wallbox (Fox charging station 7kw, 11kw or 22kw available) overcharge ?

Answer: No, as of March 2023, we can only guarantee this with our interface partner (such as Plexlog or Solarlog). At the end of the year, Fox will release its own energy management system (EMS). This is currently under development.

34. Can I control the heating elements directly?

Answer: This will be possible in the near future in conjunction with myPV (Thor Actor). This will then allow commercial heating rods to be controlled with a choice of 3kw, 5 kw or even 9kw, and there will no longer be any need to feed surplus electricity into the grid.

35. What is the maximum number / minimum number of battery modules that I can connect to the H3 or H1 ?

Answer : You can connect min / max 3 - 7 modules to the H3 (3 ~ Hybrid 5-12 kW), and min / max 2-6 modules to the H1 (1~ Hybrid).

36. What is the best way to set the SoC (State of Charge) for the batteries ?

Answer: We recommend setting the minimum SoC to 10 % and the minimum SoC (grid-connected) to 15 %. You can set the maximum SoC to 100 %.

37. When does the warranty period start ?

Answer: The warranty starts on the day of commissioning (or 6 months after delivery of

the product), whichever comes first. You can find our current warranty conditions at:
<https://www.fox-ess.com/downloads/>

38. Where can I register my equipment online ?

Answer: You can register your product at : <https://de.fox-ess.com/warranty-registration-2/#1603450715600-8ef1244c-c15c>.

39. How many amps can I loop through the SmartMeter Chint DTSU 666 ?

Answer: You can loop through the SmartMeter up to 80 A, above 80 A please use current transformers, which you must install according to the instructions (please note the direction of the arrows (pointing to the house or to the mains!).

40. How can we realise the ripple control receiver - system control ?

Answer: As of today with our interface partner Plexlog (potential-free contacts) and from the next generation H-series and T-series also on the unit itself. The same applies to the R series,

41. What options do I have for connecting to the Fox Cloud?

Answer: You can use the Wifi dongle (enclosed), if you do not have router reception in the basement, order the WLAN (wired) from the wholesaler and if you are in a rural area or on the roof, you can use the 4G dongle. (A 4G dongle whose free period has expired can be replaced with a WiFi dongle free of charge, or a new 4G dongle with costs must be purchased from the retailer).

42. Where can I find the certificates for NA protection, declarations of conformity and other certificates ?

Answer: You can download all our current certificates in the download area at Find <https://www.fox-ess.com/downloads/>

43. Are Fox ESS inverters / batteries compatible with other batteries ?

Answer: At present, it is not possible to connect other "third-party products" with our inverters. In the area of low-voltage batteries, we have a cooperation with Solis / Ginlong,

i.e. our LV batteries are compatible with Solis.

44. Which optimisers work with the Fox ESS products ?

Answer: Our products are compatible with Tigo optimisers. You can use them to implement module-level monitoring on the Tigo platform.

45. What is the best way to reach the service / after sales department ?

Answer: Our service hotline is: +49 (0) 405 3799 2120 and you can also open a ticket at: <https://support.fox-ess.com> if you have any problems. Please enter the serial number of the product, as well as a description of the error and any photos. Please also state where you bought the product, as well as your current address and / or contact details.