WHAT IS CLAIMED IS:

1. A power adapter, comprising a power conversion unit and a charging interface, the power conversion unit being configured to form a charging loop with a terminal via the charging interface so as to charge a battery of the terminal, and wherein, the power adapter further comprises:

a communication unit, configured to receive voltage indicative information from the terminal when the power adapter charges the terminal, wherein the voltage indicative information indicates an input voltage of the terminal from the power adapter detected by the terminal;

a detection unit, configured to detect an output voltage of the power adapter; and

an anomaly handling unit, configured to determine, according to a difference between the input voltage and the output voltage, whether an impedance of the charging loop is abnormal, and to control the charging loop to enter into a protection state if the impedance of the charging loop is abnormal;

wherein, the anomaly handling unit is configured to:

determine a level of the impedance according to the difference; and

control, according to the level of the impedance, the charging loop to enter into a protection state corresponding to the level.

2. The power adapter according to claim 1, wherein,

detection positions of the input voltage of the terminal from the power adapter and the output voltage of the power adapter are located at two ends of the charging interface respectively, and the impedance of the charging loop refers to an impedance of a circuit in the charging interface.

3. The power adapter according to claim 1, wherein, a detection position of the input voltage of the terminal from the power adapter is located at two ends of the battery of the terminal, and the impedance of the charging loop refers to an impedance of a circuit from the power adapter to the battery of the terminal.

4. The power adapter according to any one of claims 1-3, further comprising:

an alarm device, configured to generate an alarm signal if the impedance of the charging loop is abnormal.

5. The power adapter according to any one of claims 1-4, wherein, the communication unit is configured to send charging protection indicative information to the terminal if the impedance of the charging loop is abnormal, so as to indicate the terminal to control the charging loop to enter into the protection state.

6. The power adapter according to any one of claims 1-5, wherein, the charging interface comprises a power wire and a data wire;

the power conversion unit is configured to:

form the charging loop with the terminal via the power wire in the charging interface, so as to charge the battery of the terminal; and

the communication unit is configured to:

receive the voltage indicative information from the terminal via the data wire in the charging interface.

7. A terminal, comprising a battery and a charging interface, the terminal being configured to form a charging loop with a power adapter via the charging interface so as to charge the battery, and wherein, the terminal further comprises a detection unit, a communication unit and an anomaly handling unit,

the detection unit is configured to detect an input voltage of the terminal from the power adapter when the power adapter charges the terminal;

the communication unit is configured to send voltage indicative information to the power adapter, wherein the voltage indicative information indicates the input voltage of the terminal from the power adapter detected by the detection unit, and to receive charging protection indicative information from the power adapter if the power adapter determines based on a difference between an output voltage of the power

adapter and the input voltage of the terminal from the power adapter that an impedance of the charging loop is abnormal; and

the anomaly handling unit is configured to control the charging loop to enter into a protection state according to an indication of the charging protection indicative information;

wherein, the indication of the charging protection indicative information is configured to indicate a protection state corresponding to a level of the impedance determined according to the difference.

8. The terminal according to claim 7, wherein, the charging interface comprises a power wire and a data wire;

the terminal is configured to:

form the charging loop with the power adapter via the power wire in the charging interface, so as to charge the battery; and

the communication unit is configured to:

send the voltage indicative information to the power adapter via the data wire in the charging interface.

9. The terminal according to claim 7 or 8, wherein,

detection positions of the input voltage of the terminal from the power adapter and the output voltage of the power adapter are located at two ends of the charging interface respectively, and the impedance of the charging loop refers to an impedance of a circuit in the charging interface.

10. The terminal according to claim 7 or 8, wherein, the detection unit is configured to detect the input voltage of the terminal from the power adapter at two ends of the battery, and the impedance of the charging loop refers to an impedance of a circuit from the power adapter to the battery of the terminal.

11. The terminal according to any one of claims 7-10, further comprising:

an alarm device, configured to generate an alarm signal if the impedance of the charging loop is abnormal.

12. A method for handling an impedance anomaly in a charging loop, comprising:

receiving, by a power adapter, voltage indicative information from a terminal when the power adapter charges the battery, wherein the voltage indicative information indicates an input voltage of the terminal from the power adapter detected by the terminal;

detecting, by the power adapter, an output voltage of the power adapter; and

determining, by the power adapter according to a difference between the input voltage and the output voltage, whether an impedance of the charging loop is abnormal; and controlling, by the power adapter, the charging loop to enter into a protection state if the impedance of the charging loop is abnormal;

wherein, determining, by the power adapter according to the difference between the input voltage and the output voltage, whether the impedance of the charging loop is abnormal; and controlling, by the power adapter, the charging loop to enter into the protection state if the impedance of the charging loop is abnormal, comprises:

determining, by the power adapter, a level of the impedance according to the difference; and

controlling, by the power adapter according to the level of the impedance, the charging loop to enter into a protection state corresponding to the level.

13. The method according to claim 12, wherein, the power adapter charges the terminal via a charging interface, detection positions of the input voltage of the terminal from the power adapter and the output voltage of the power adapter are located at two ends of the charging interface respectively, and the impedance of the charging loop refers to an impedance of a circuit in the charging interface.

14. The method according to claim 12, wherein, a detection position of the input voltage of the terminal from the power adapter is located at two ends of the battery of the terminal, and the impedance of the charging loop refers to an impedance of a circuit from the power adapter to the battery of the terminal.

15. The method according to any one of claims 12-14, wherein, further comprising:

generating, by the power adapter, an alarm signal indicating that the impedance of the charging loop is abnormal.

16. The method according to any one of claims 12-15, further comprising:

sending, by the power adapter, charging protection indicative information to the terminal if the impedance of the charging loop is abnormal, so as to indicate the terminal to control the charging loop to enter into the protection state.

17. The method according to any one of claims 12-16, wherein, the power adapter charges the terminal via a charging interface,

the charging interface comprises a power wire and a data wire;

the power adapter charges the terminal via the power wire in the charging interface; and

receiving, by the power adapter, the voltage indicative information from the terminal comprises: receiving by the power adapter the voltage indicative information from the terminal via the data wire in the charging interface.

18. A method for handling an impedance anomaly in a charging loop, comprising:

detecting, by a terminal, an input voltage of the terminal from a power adapter when the power adapter charges the terminal;

sending, by the terminal, voltage indicative information to the power adapter, wherein the voltage indicative information indicates the input voltage of the terminal from the power adapter detected by the terminal;

receiving, by the terminal, charging protection indicative information from the power adapter if the power adapter determines based on a difference between an output voltage of the power adapter and the input voltage of the terminal from the power adapter received from the terminal that an impedance of the charging loop is abnormal; and

controlling, by the terminal, the charging loop to enter into a protection state according to an indication of the charging protection indicative information;

wherein, the indication of the charging protection indicative information is configured to indicate a protection state corresponding to a level of the impedance determined according to the difference.

19. The method according to claim 18, wherein, a charging interface comprises a power wire and a data wire, and the power adapter charges the terminal via the power wire in the charging interface, and

sending, by the terminal, the voltage indicative information to the power adapter, comprises: sending, by the terminal, the voltage indicative information to the power adapter via the data wire in the charging interface.

20. The method according to claim 18 or 19, wherein, detection positions of the input voltage of the terminal from the power adapter and the output voltage of the power adapter are located at two ends of the charging interface respectively, and the impedance of the charging loop refers to an impedance of a circuit in the charging interface.

21. The method according to claim 18 or 19, wherein, a detection position of the input voltage of the terminal from the power adapter is located at two ends of a

battery of the terminal, and the impedance of the charging loop refers to an impedance of a circuit from the power adapter to the battery of the terminal.

22. The method according to any one of claims 18-21, further comprising:

generating, by the terminal, an alarm signal if the impedance of the charging loop is abnormal.