What is claimed is:

1. A water electrolysis device, comprising:

a case comprising a base, a side wall and a containing space;

a power supplying unit configured in the containing space of the case;

an ion-exchange membrane electrolyzer electrically coupled to the power supplying unit, the ion-exchange membrane electrolyzer comprising an ion-exchange membrane, a cathode, and an anode, the ion-exchange membrane being configured between the anode and the cathode; wherein when the ion-exchange membrane electrolyzer electrolyzes water, the cathode generates hydrogen gas to be outputted and the anode generates oxygen gas to be outputted;

an atomizing/volatile gas mixing tank coupled to the power supplying unit, the atomizing/volatile gas mixing tank selectively generating an atomizing gas and mixing it with the hydrogen gas to form a health gas, wherein the atomizing gas is water vapor, atomizing potions or volatile essential oil; and

an integrated pathway module coupled to the ion-exchange membrane electrolyzer to receive the hydrogen gas and the oxygen gas, and coupled to the and the atomizing/volatile gas mixing tank to deliver the hydrogen gas to the atomizing/volatile gas mixing tank.

2. The water electrolysis device of claim 1, wherein the power supplying unit further comprises a high power output and a low power output, the ion-exchange membrane electrolyzer is electrically coupled to the high power output and the atomizing/volatile gas mixing tank is electrically coupled to the low power output.

3. The water electrolysis device of claim 1, wherein the ion-exchange membrane electrolyzer further comprises a first side, a second side, a

hydrogen output tube, and an oxygen output tube; the anode is configured between the ion-exchange membrane and the second side; the cathode is configured between the ion-exchange membrane and the first side; the oxygen output tube extends from the position between the ion-exchange membrane and the second side to the second side and passes through the second side to output the oxygen gas; and the hydrogen output tube extends from the position between the ion-exchange membrane and the first side to the second side and passes through the second side to output the hydrogen gas.

4. The water electrolysis device of claim 1, wherein the ion-exchange membrane electrolyzer further comprises a first side, a second side, a hydrogen output tube, and an oxygen output tube; the anode is configured between the ion-exchange membrane and the first side; the cathode is configured between the ion-exchange membrane and the second side; the hydrogen output tube extends from the position between the ion exchange membrane and the second side to the second side and passes through the second side; and the oxygen output tube extends from the position between the ion exchange membrane and the first side to the second side and passes through the second side.

5. The water electrolysis device of claim 2, wherein the high power output outputs a first voltage and a first current; the low power output outputs a second voltage and a second current; the first voltage is less than the second voltage; and the first current is greater than the second current.

6. The water electrolysis device of claim 1, wherein the first side faces the side wall, the hydrogen output tube and the oxygen output tube are positioned on the second side of the ion-exchange membrane electrolyzer.

7. The water electrolysis device of claim 2, wherein the electric power outputted by the low power output is equal to or less than half of that outputted by the high power output.

8. The water electrolysis device of claim 1, wherein the ion-exchange membrane electrolyzer further comprises a hydrogen output tube for outputting the hydrogen gas, an oxygen output tube for outputting the oxygen gas, and a water supplying pipe for receiving a supplemental water, the hydrogen output tube, the oxygen output tube and the water supplying pipe extend outward from the same side of the ion-exchange membrane electrolyzer.

9. The water electrolysis device of claim 8, wherein the integrated pathway module comprises a hydrogen interface, an oxygen interface, and a water interface, the hydrogen interface, an oxygen interface, and a water interface are configured on the same side of the integrated pathway module and respectively corresponding to the hydrogen output tube, the oxygen output tube and the water supplying pipe of the ion-exchange membrane electrolyzer.

10. The water electrolysis device of claim 1, wherein the integrated pathway module further comprises a water tank and a gas-water separation tank isolated from the water tank, the gas-water separation tank is configured to receive the hydrogen gas from the ion-exchange membrane electrolyzer, the water tank is configured to receive the oxygen gas from the ion-exchange membrane electrolyzer and to provide a supplemental water to the ion-exchange membrane electrolyzer.

11. The water electrolysis device of claim 1, further comprising a pump fluidly coupled to the integrated pathway module, the pump is configured to supply air into the integrated pathway module to dilute the hydrogen gas in the integrated pathway module.