CLAIMS

1. A wireless sensor that measures a state value related to a mobility system in which a moving body obtains electric power from a power supply line in a non-contact manner, and wirelessly transmits the measured state value, comprising:

a non-contact power receiving unit that obtains electric power from the power supply line in a non-contact manner;

a measurement unit that operates by electric power supplied from the non-contact power receiving unit and measures the state value at a to-be-measured part of the mobility system; and

a wireless transmission unit that operates by electric power supplied from the non-contact power receiving unit and wirelessly transmits the state value measured by the measurement unit, wherein

the non-contact power receiving unit is an E-shaped core with one side open, and a position of the power supply line is fixed with respect to the E-shaped core.

2. The wireless sensor according to claim 1, wherein

a temperature is measured as the state value.

3. The wireless sensor according to claim 2, wherein

in addition to the temperature, a voltage of the power supply line is measured as the state value.

4. The wireless sensor according to claim 2 or 3, wherein

the to-be-measured part is a connection part between the power supply line and

a terminal block to which the power supply line is electrically connected, or a part in the vicinity of the connection part.

5. The wireless sensor according to claim 4, wherein the terminal block is arranged inside a casing made of metal, and

the wireless transmission unit is arranged outside of the casing.

6. The wireless sensor according to any one of claim 1 to 5, comprising:

a mounting unit that fixes a position of the non-contact power receiving unit, wherein

the mounting unit defines a relative position of the power supply line and the E-shaped core.

7. A mobility system comprising:

the wireless sensor according to any one of claim 1 to 6 ;

a plurality of moving bodies that obtain electric power from the power supply line in a non-contact manner; and

a management device that collects the state value measured by the wireless sensor, wherein

the wireless sensor transmits the measured state value to the management device via wireless communications.