



**Digital modules remote diagnostics of power lines are the elements of
DIGITAL TWIN for Power line 6-110 kV**

1) MODULE OF REMOTE DIAGNOSTICS OF POWER LINES

- amperage in power line;
- wire temperature;
- the angle of wire sag;
- amplitude and frequency vibration of conductor;
- wire breakage in the span;
- GPS positioning and attachment the power line to the topographic base

2) MODULE OF REMOTE DIAGNOSTICS OF PL ISOLATIONS

- leakage current and its change depending on meteo and other parameters
- angle of deviation of conductor from the vertical axis;
- wire breakage in the span.

3) SECURITY MODULE PL

- unauthorized entry into the security zone of PL;
- unauthorized lifting on supporting tower of PL;
- prevention of metal theft and damage of supporting tower of PL.

4) REMOTE DIAGNOSTICS MODULE SUPPORTING TOWER OF PL

- angle of tower;
- amplitude and frequency of vibration of the upper part

5) METEOROLOGICAL STATION OF PL

- temperature;
- humidity;
- wind speed and direction ;
- precipitation value;
- solar activity;
- obtaining of the forecast of meteorological data via Network;
- artificial intelligence processing methods.