

# Remote monitoring and maintenance on cranes and lifting systems

The use of Nethix devices, to control lifting and skidding systems, allows to detect and solve any possible fault or malfunction of the plant, without requiring the intervention of service operators.

With Nethix solutions it's also possible to acquire all relevant operating parameters of the machine, in order to deliver them to an external monitoring platform (Nethix Cloud or others) and make them available in tabs or charts from any PC or device.

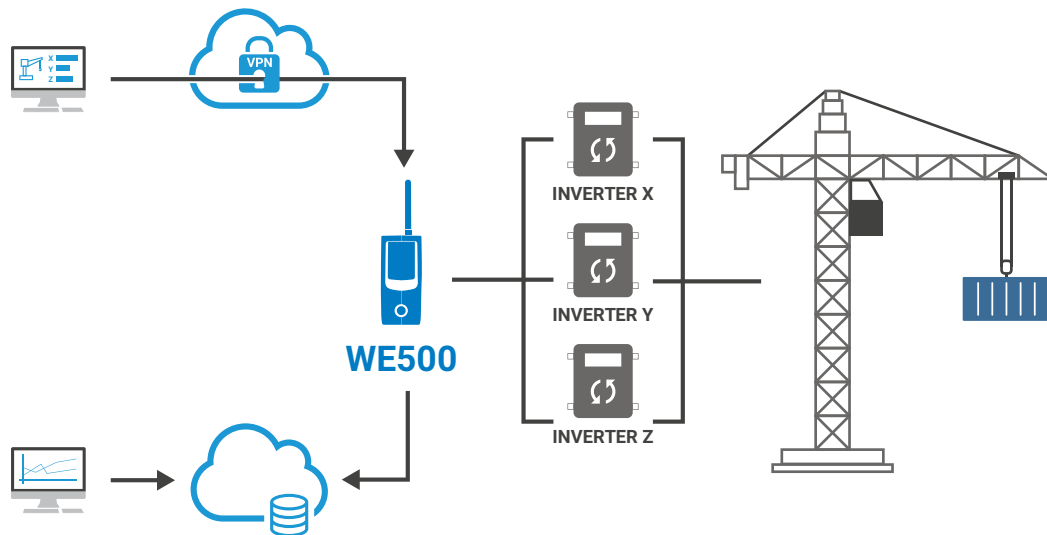
## DESCRIPTION OF THE SYSTEM

WE500 communicates through Modbus RTU (TCP/IP) protocol with the Inverters, that control the movements of the crane.

Thanks to the integrated Modem and Web Interface, it can then establish an internet connection, suitable to perform the remote maintenance.

WE500 can establish a VPN connection to a server (Nethix Cloud or any third party Cloud), in order to grant a secure and private communication between the operator and the machine.

Once established the connection, the operator can set parameters as the limit switch and the acceleration value of the three main movements: lifting, rotating and skidding. This type of intervention allows to manage a personalized configuration for each crane, and fulfill any specific requirement of the system (for example it allows to adjust the acceleration value according to the typical wind power in the deployment zone).



Beside the function of opening a communication channel between the operator and the inverter, the WE500 can collect all main operating parameters of the plant, as for instance:

- Current/tension in the input/output of the inverter
- Output frequency of each axis
- Operating hours of the lifting, rotating and skidding groups
- Weight of the load
- Possible errors given by the inverters
- Completed working cycles of the crane
- Other parameters

Once acquired all parameters, WE500 can deliver them to the Nethix Cloud (or any other third platform), allowing the centralized collection of the data coming from all the installations.

The collected data can be visualized as charts or tabs and exported at any time.