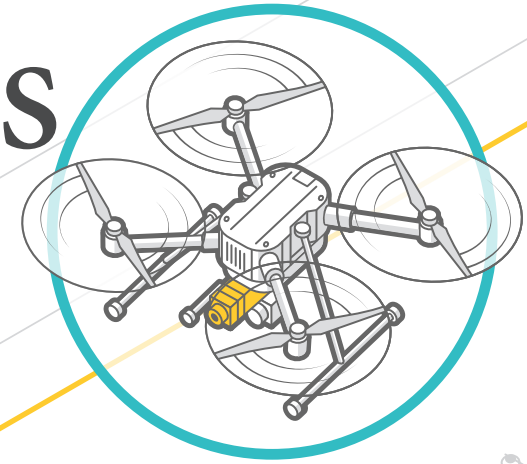
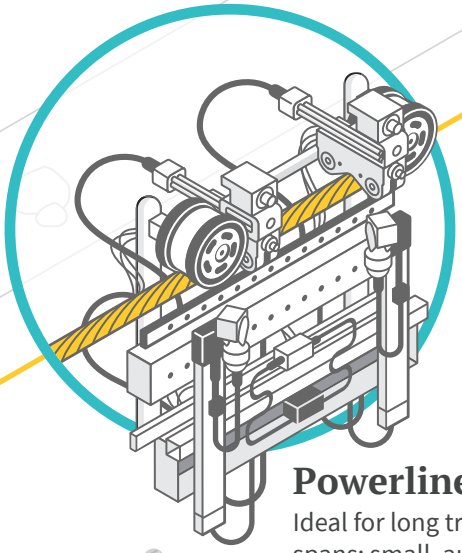
Utility Robots

Robots are beginning to make inroads in several industries, including the electric utility sector. These specially designed machines are ideal for mitigating safety risks for human crews, taking on dangerous tasks like surveying storm damage, troubleshooting equipment failures and inspecting systems in confined spaces and other hard-to-reach areas. Future utility robots will function autonomously, using machine learning and artificial intelligence to install, maintain and repair components in power plants and on the grid. Here are some of the various robots utilities will use and the functions they'll serve.



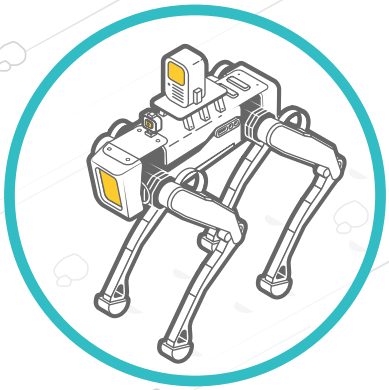
UAS/Drone

Birds-eye view and a host of sensors make drones ideal for outage trouble-shooting and routine inspections of overhead equipment.



Powerline robot

Ideal for long transmission spans; small, autonomous crawlers conduct regular surveillance of line condition and trouble trees.

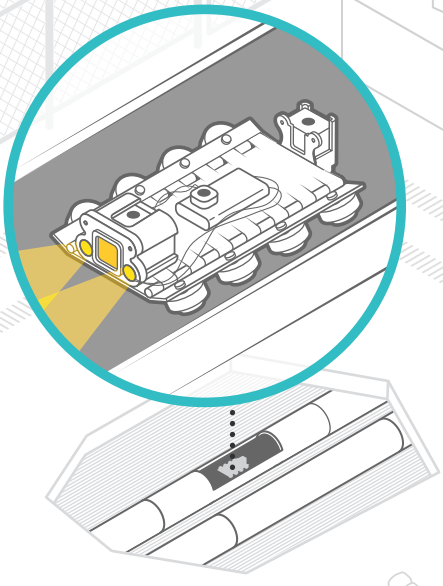


Four-legged robot

Agile, autonomous device with sensors and cameras for safe inspection of substations, distribution and transmission equipment and remote facilities.

Crawler robot

Small, low-profile unit with lights and cameras that can move through confined underground spaces like manholes to inspect cables and other equipment.



Substation robot

Autonomous wheeled or tracked units that use cameras, infrared and motion sensors to patrol substations and conduct equipment inspections.