



The artificial intelligence monitors the ideal growing conditions for each type of plant | Photo source [Creo](#)

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AI-BASED SYSTEM FOR 'LIVING WALLS' THAT GENERATE CLEAN AIR INDOORS

 WORK & LIFESTYLE

The living wall system tracks conditions in order to automatically water and feed plants as required

Spotted: Designed for home or office use, the BioBulb smart plant management system by Creo makes it easy to maintain a living wall. Clean air has never been more necessary, as communities begin to gradually reopen, and a living wall of plants is a particularly beneficial way of contributing to the overall health and wellbeing of people using shared spaces. The BioBulb system is modular, which allows for the distributed set-up of plants in various rooms of an office or home.

Connected to a central Bio-Server via thin, flexible tubing, the artificial intelligence monitors the ideal growing conditions for each type of plant. Three sensors in each pot track plant health, and the air, light and temperature conditions and acidity of water and soil near the roots. Depending on what is needed, nutrients and water are directed to each pot at the most appropriate time.

As resources are distributed only as needed, there is no risk of over or under-watering, and the entire system is nearly zero-waste. Although similar to hydroponic set-ups, BioBulb uses a small amount of soil, which the team says makes the entire system more efficient, as it more closely mimics the natural environment and the ways in which roots grow and work.

Now working with early adopters to expand the technology, the Biobulb team is developing a Bio-Plug to connect large networks of plants across buildings and between different floors, to a single Bio-Server.

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Takeaway:

As urban living grows denser, more and more projects are finding ways to make efficient use of space to help increase the contact that people have with greenery. Springwise has spotted supermarket [parking lots](#) transformed into urban farms and an open-source [hydroponics project](#) that supports people in building and growing at home.