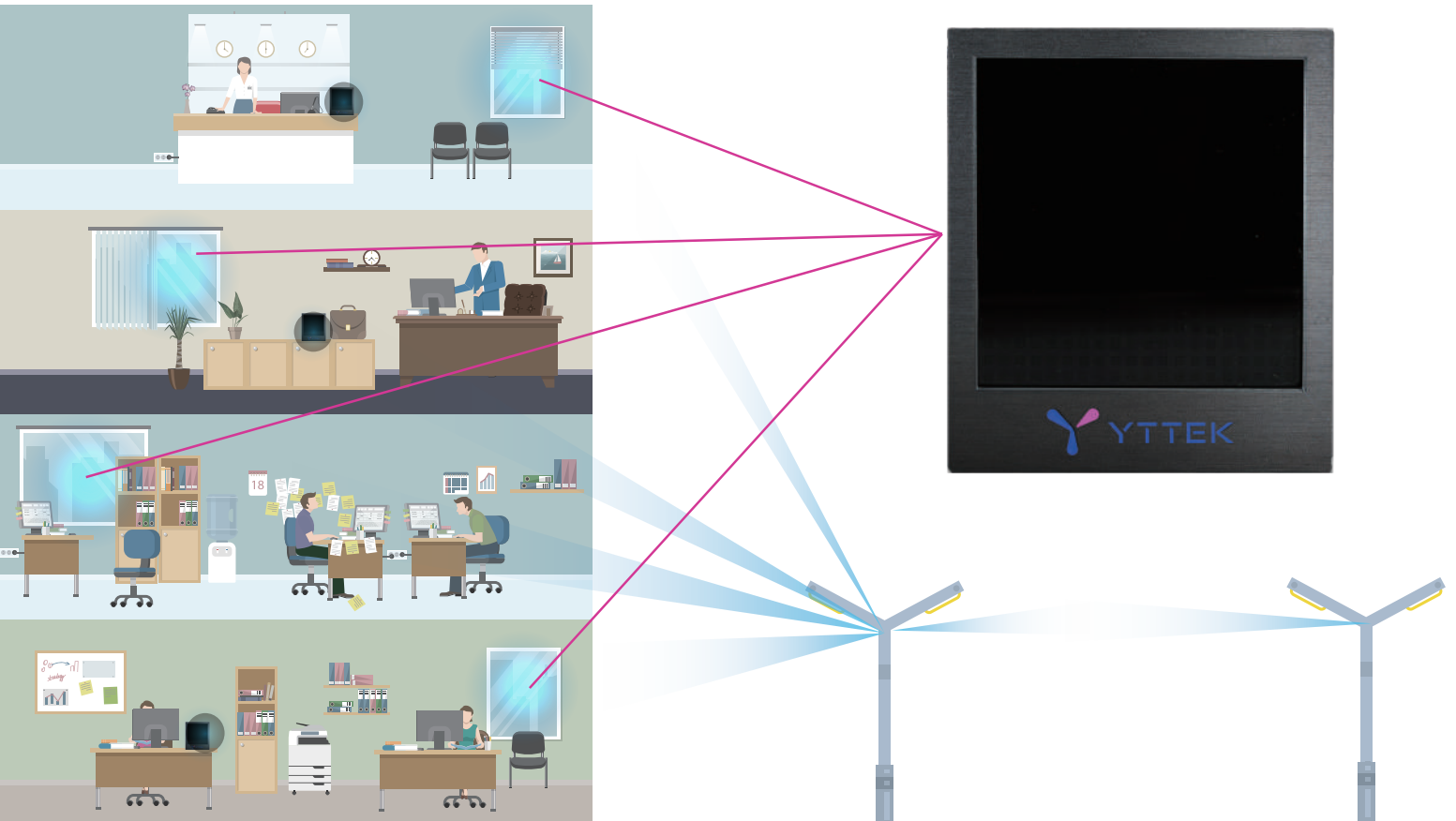
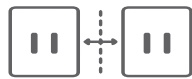




Liquid Crystal Reconfigurable Intelligence Surface



120mm by 120mm
Unit Cell



400 Pixel Space
RIS Element



29.4GHz
Operating
Frequency



Driving Voltage
8V
Power Consumption
 $\leq 500\text{mW}$

Y.RIS is a Liquid Crystal Reconfigurable Intelligence Surface (LC-RIS) development kit. A programmable reflected surface made by 400 unit cells with size of 120 mm by 120 mm, which can be controlled by varying driving voltage individually. By delicately designing phase distribution on LCRIS, the beam direction of reflected wave is easy to manipulate.

Y.RIS provides a user-friendly interface, and it's easy to control and demonstrate. A simple interface GUI, user enters an incident wave angle and a desired reflected wave angle. Y.RIS internal algorithm will calculate the reflected phase distribution or its driving voltage distribution.