

Four things Brainboxes does on a plant floor

Run data off a line that is already validated: states, counts and temperatures onto your dashboard, with the machine controls never touched.

1



Read the machine without opening it

Remote I/O picks up states, counts and temperatures at the sensor and presents them as **Modbus TCP devices your own software polls**. The qualified controller is never touched, so what was validated stays validated.

2



The old line already has the port

The machine that only has an RS-232 or RS-485 port goes on the network through it, and **the plant PC still sees the same COM port**. Nothing on the software side changes, which is where these projects usually die.

3



The manual station counts too

A pushbutton, a foot switch or a light stack is a digital input. **The module that reads a robot cell reads the hand-assembly bench**, so the data gap on the manual stations closes at the same time.

4



The switch that lives in the cabinet

Compact unmanaged and PoE switches on the DIN rail, so the new modules, sensors and cameras join **one network from inside the panel you already have**.

A data layer beside the controls

Sits outside the control loop and moves information up to MES, historians and dashboards without interfering with machine operation.

Lands where your data already lands

Modbus TCP, raw TCP, or a Windows COM port, into the SCADA, historian or dashboard you already run. LabVIEW, MATLAB and the VIs you have keep working.

Where it is the wrong answer

Anything deterministic, safety rated, or inside the control loop stays with the controller vendor's I/O. We will say so.