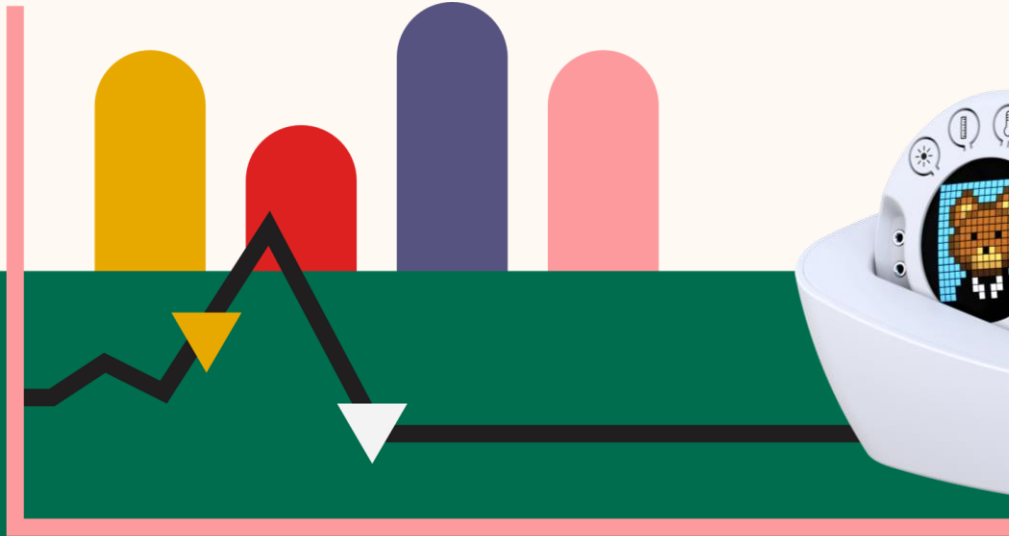




# Xploris

One stop shop for k-6 STEAM



# Unique STEAM solution


**Xploris does it all:** An orchestra of STEAM learning in a compact, hand-held disc

A stylized illustration for Engineering. It features a yellow lightbulb with a white zigzag filament inside a white circle. The background is a mix of red, pink, and purple. A purple circle with a white right-pointing arrow is in the top left. The bottom section is black.

**Engineering**  
By producing various control outputs.

A stylized illustration for Science & Math. It shows a line graph with a black line and a yellow triangle pointing up, and a white triangle pointing down. The background has teal, green, and purple elements. The bottom section is teal.

**Science & Math**  
Experimentation with Xploris 5 built in sensors.

A stylized illustration for Coding. It features a stack of colorful blocks in yellow, purple, pink, and teal. The background is dark purple and black. The bottom section is yellow.

**Coding**  
Through Blockly and Python languages.

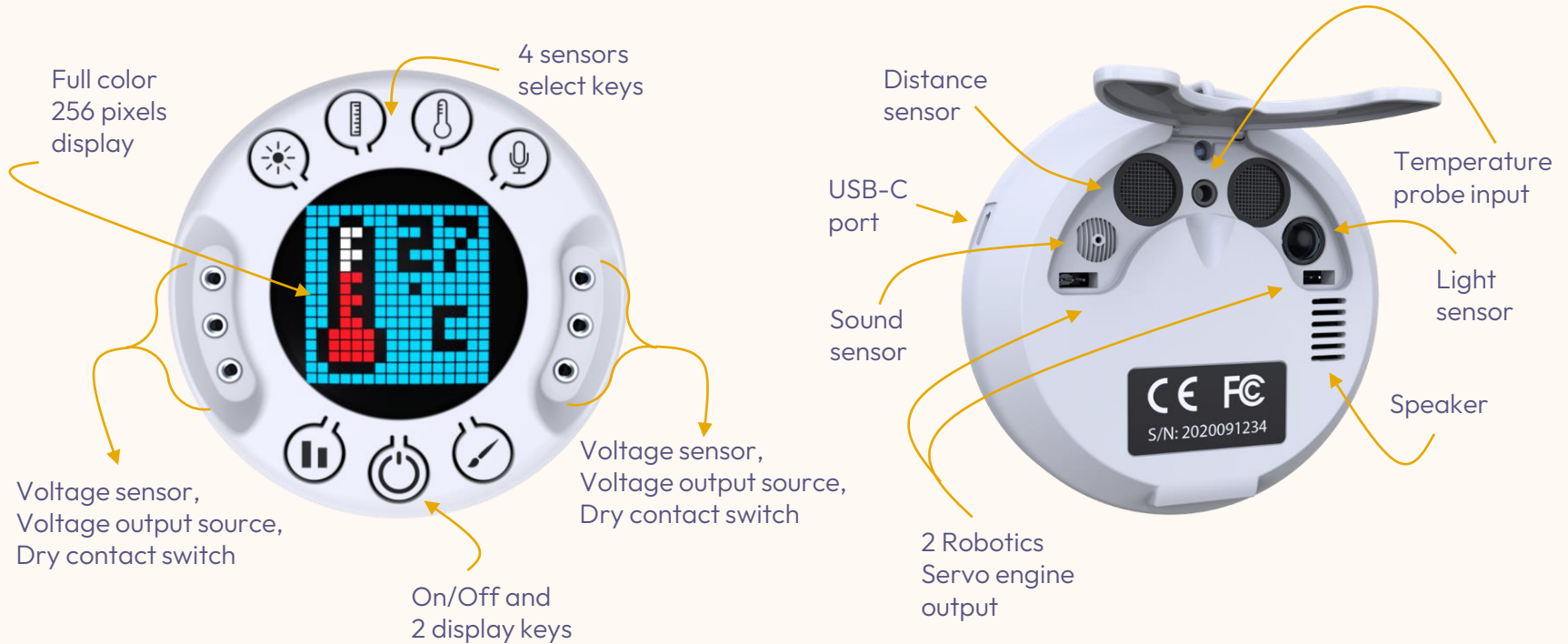
A stylized illustration for Art. It shows a pink pencil tip pointing down into a pink square. The background is green, red, and purple. The bottom section is green.

**Art**  
By creating pixel-art images/animations.



Xploris offers students an integrated end-to-end STEAM experience, from creating a pixel art flower animation to apply coding that opens the flower's leaves when sunlight is projected on a light sensor”

# Xploris – ports and controls



# Hardware features



## Sensing & Data logging

- 5 sensors: Light, Temperature, Sound, Distance, Voltage.
- Displaying numeric sensor value and sensor bar graph.



## Art

- 16x16 RGB LED matrix.
- Using the full color pixel matrix for creating graphics and animations.



## Coding

- Internal processor directly supporting Python and Blocks.

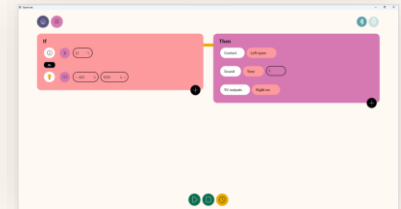
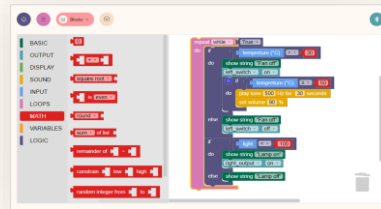
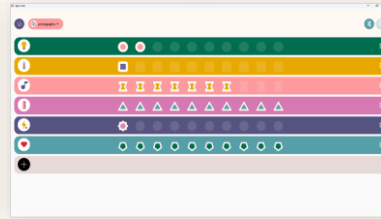
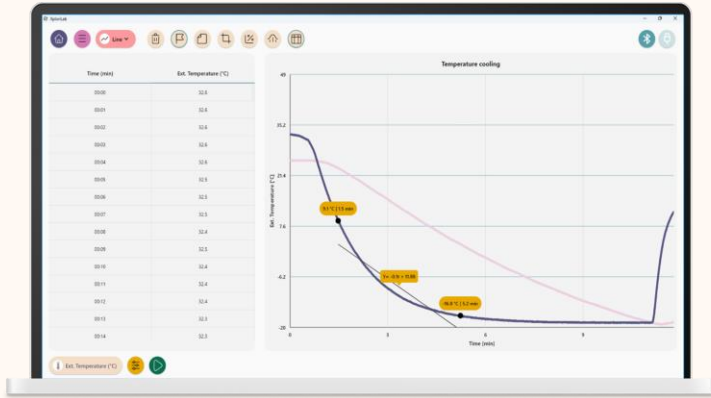


## Control

- 2 on/off outputs.
- 2 voltage output.
- 2 servo engine outputs.

# XploriLab - full suite of STEAM apps

Science sensing, datalogging, coding, control and art.



# Pedagogic coverage

Full integration of all STEAM subjects



## Science & Math

- **Data visualization:** gauges, pictographs, bar graphs, tables, line graphs.
- **Data analysis:** markers, annotations, linear regressions, Export to EXCEL.



## Coding

- **Platforms:** Blockly, and Python editor.
- **Covering:** data types, variables, logical operators, If/else conditions, loops, Input and output operations.



## Art

- **Introduction to:** colors, drawing, pixel art and character creation.
- **Covering:** frame by frame animation, shapes and geometry, sensors and code controlled animation.



## Control

- **Method:** sensors based output levels.
- **Controlling:** animation speed, servo speed, servo angle, contact open/close, 5V output on/off.



**Thank you!**