

Description (See product pages for documentation)	Part Number	Price (USD)	Total Number Required	USA Source	Global Source	
Basic Essentials - Grassroots Network						
Baseboard + USB C Cable (full featured)	RAK19001	13.50	1	Rokland	RAKwireless	13.50
Baseboard + USB C Cable (few features)	RAK19007	9.99	2	Rokland	RAKwireless	19.98
(2) Computational Core + Small Antenna	RAK11310	9.95	3	Rokland	RAKwireless	29.85
Temperature & Humidity Sensor	RAK1901	4.60	1	Rokland	RAKwireless	4.60
(1) Total Cost		67.93				
Optional Accessories						
(4) Manual Precision Screwdriver	SKU:920430	10.00	1	Rokland	RAKwireless	10.00
(3) Stand-alone magnifying light	many types	40.00	1	Amazon	Amazon	40.00
(5) Solar Unify Enclosure IP67	RAKBox-B2	29.00	1	Rokland	RAKwireless	29.00
(6) Soil-Moisture Sensor	VH400-2M	45.00	1	Vegetronix	Vegetronix	45.00
0-5V Interface Module	RAK5811	6.00	1	Rokland	RAKwireless	6.00
Total if all purchased:		130.00				
For Exploring Image Transmission						
Arduino Microcontroller	Uno R3	28.00	1	Amazon	Amazon	28.00
USB 2.0 Cable	Type A/B	7.00	1	Amazon	Amazon	7.00
RaspberryPi single-board computer	RPi-v4	129.00	1	Amazon	Amazon	129.00
Ethernet Cable	select length	7.00	1	Amazon	Amazon	7.00
Micro SD Card	16gb	8.00	1	Amazon	Amazon	8.00
USB Micro SD Card Adaptor	UNI Reader	9.00	1	Amazon	Amazon	9.00
PixyCam + Connector Cable	Pixy2.1	70.00	1	Amazon	Amazon	70.00
Total if all purchased:		258.00				

(1) Prices are from RAKwireless at time of writing. They do not include shipping or taxes.

Rokland prices are generally higher but they pay for shipping.

"Cost" refers to the sum of individual prices times the number required.

(2) Be sure to specify the LoRa frequency appropriate to your country.

Rokland only sells for North America. RAKwireless' product page has an interactive map that shows which frequency to select. Notice that some nations do not allow unlicensed radio broadcasts.

(3) When purchasing a lamp, be sure it works well with your nation's electrical outlets. Not all lamps are dual voltage/frequency.

Nor do all have the correct plug for a nation's electrical outlets.

A nation-specific adaptor added to the plug may be sufficient to fit the plug to the outlet.

[See these examples of plug adaptors.](#)

(4) The screwdriver that I received came with a sheath. Retain the sheath to protect the blade itself and the user when the tool is not in use.

(5) Depending on your needs, you may also want the pole-mounting and antenna accessories. These add about \$20 to the cost.

(6) This is an industrial-grade sensor that happened to be already on hand. For brief indoor experiments, cheaper sensors will do. For instance: <https://amzn.to/4QDeuvC>. These are not direct substitutes. One has to study and understand the new sensor, and correctly integrate it with the host device and the soil in question.