

Description (See product pages for documentation)	Price (USD)	Total Number Required	Source (2)	
<i>A suitable Linux or Windows computer is assumed to exist and to have at least three internal, available, and powered USB ports. (4)</i>				
<b>Basic Essentials - Grassroots Network</b>				
Arduino MKR WAN 1310 Baseboard , with antenna	46.00	3	<a href="#">Arduino Official Store</a>	138.00
Micro USB Cable (USB A / USB B)	6.90	3	<a href="#">Arduino Official Store</a>	20.70
Male-Male jumper wires	4.80	1	<a href="#">Arduino Official Store</a>	4.80
(1) Total Cost	163.50			
<b>Optional Accessories</b>				
Stand-alone magnifying light	40.00	1	<a href="#">Amazon</a>	40.00
(3) Soil-Moisture Sensor	45.00	1	<a href="#">Vegetronix</a>	45.00
Total if all purchased:	85.00			
<b>For Exploring Image Transmission</b>				
Arduino Uno R3	28.00	1	<a href="#">Amazon</a>	28.00
USB 2.0 Cable	7.00	1	<a href="#">Amazon</a>	7.00
RaspberryPi single-board computer	129.00	1	<a href="#">Amazon</a>	129.00
Ethernet Cable	7.00	1	<a href="#">Amazon</a>	7.00
Micro SD Card	8.00	1	<a href="#">Amazon</a>	8.00
USB Micro SD Card Adaptor	9.00	1	<a href="#">Amazon</a>	9.00
PixyCam + Connector Cable	70.00	1	<a href="#">Amazon</a>	70.00
Total if all purchased:	258.00			

(1) Prices are at time of writing. They do not include shipping or taxes.  
"Cost" refers to the sum of individual prices times the number required.

(2) "Arduino Official Store" refers to Arduino's global network.  
See the bottom-right of the page to select your region.

(3) 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/40DeuvC>.  
One has to study and understand the new sensor, and correctly integrate it  
relative to the host device and the soil in question.

(4) My personal experience is that a USB port extender, even powered,  
is insufficient to meet this criterial. Rather, the ports need to be internal to  
the PC and independent of each other. To be sure, this adds cost to the PC.