

| System Cost | | 499.35 | | | | | | | | | |
|--|--------------|-------------|-----------------|-------------------|------------------------------------|-------------------|--|----------------|---------------|-----------------|--------------|
| Module Name | Module Group | Module Cost | Module Quantity | Module Total Cost | Item Name | Consumable? (y/n) | Item Description | Item Unit Cost | Item Quantity | Item Total Cost | Item Vendor |
| Infrastructure Modules | | | | | | | | | | | |
| Chassis Module | Pilot | 51.32 | 1 | 51.32 | Foam Sheet | n | FOAMULAR 250 2 in. x 2 ft. x 8 ft. Tongue and Groove R-10 Insulation Sheathing | 20.85 | 1 | 20.85 | Home Depot |
| | | | | | Large Zip Ties | y | 25 Pack 24" Cable Ties Heavy Duty 160lb 9mm x 24" Long Cable Ties Zip Ties | 12.49 | 1 | 12.49 | Amazon Prime |
| | | | | | Small Zip Ties | y | Install Bay BCT8S Cable Tie 8-Inch 18-Pounds Thin, Black (100-Pack) | 4.84 | 1 | 4.84 | Amazon Prime |
| | | | | | Tape | y | Devek Premium Gaffer Tape Matte Cloth With Rubber Adhesive 12.5 Mil Thick 4 Inch x 10 Yards White | 13.14 | 1 | 13.14 | Amazon Prime |
| Grow Basin Module | Pilot | 39.95 | 1 | 39.95 | Basin | n | Commercial 3351GRA Bus/Utility Box, 7.125gal, Gray (RCP3351GRA) | 13.96 | 1 | 13.96 | Amazon Prime |
| | | | | | Tray | n | Use Foam From Chassis | 0 | 1 | 0 | None |
| | | | | | Water Manifold | n | Use Foam From Chassis | 0 | 1 | 0 | None |
| | | | | | Horticubes | y | Oasis Horticubes 2 Pack | 25.99 | 1 | 25.99 | Amazon |
| Arduino Controller Module | Pilot | 35.32 | 1 | 35.32 | Arduino Uno | n | MakerBest Hight Quality Compatible Arduino UNO R3 ATmega328P Development Kits | 9.99 | 1 | 9.99 | Amazon Prime |
| | | | | | USB A-to-B Cable | n | Included in Arduino Uno Item | 0 | 1 | 0 | None |
| | | | | | Barrel Jack Cable | n | Sinddy High Quality 10pack 10 inch(30cm) 2.1 x 5.5mm DC Power Pigtail MALE | 6.14 | 1 | 6.14 | Amazon Prime |
| | | | | | Screw Shield | n | Interface Development Tools Screw Shield | 10.5 | 1 | 10.5 | Amazon |
| | | | | | 12" Red Hookup Wire | n | Included in Wiring Starter Pack Pilot Module | 0 | 3 | 0 | None |
| | | | | | Relay Shield | n | XCSOURCE® Four channel Relay Shield 5V 4 Channel 4CH Relay Shield Module for Arduino TE315 | 8.69 | 1 | 8.69 | Amazon Prime |
| Power Module | Pilot | 40.91 | 1 | 40.91 | 6-Channel Power Strip | n | AmazonBasics 6-Outlet Surge Protector Power Strip, 790 Joule - White | 9.99 | 1 | 9.99 | Amazon Prime |
| | | | | | 12V-30A Power Supply | n | NEWSTYLE 12v 30a Dc Universal Regulated Switching Power Supply 360w for CCTV, Radio, Computer Project | 19.98 | 1 | 19.98 | Amazon Prime |
| | | | | | 2' Extension Cable | n | SF Cable, 2ft Ultra Low Profile Angle NEMA 5-15P to 5-15R with 24 inches 16/3 AWG SJT | 8.95 | 1 | 8.95 | Amazon Prime |
| | | | | | 12" Red Hook-up Wire | n | Included in Wiring Starter Pack Pilot Module | 0 | 1 | 0 | None |
| | | | | | 5-Channel Easy Connector | n | Included in Wiring Starter Pack Pilot Module | 0 | 2 | 0 | None |
| | | | | | 30A Fuse | y | Included in 12" Black Inline Fuse Hook-Up Wire Item | 0 | 1 | 0 | None |
| | | | | | 12" Black Inline Fuse Hook-up Wire | n | Replacement In-line Inline in Line ATM ATP Fuse Holder 30a Rated Black Mini 14-16 Ga Equivalent to Littelfuse 0thm0001zxj Inline Low Profile Waterproof. Fsn15 | 1.99 | 1 | 1.99 | Amazon |
| Sensor Modules | | | | | | | | | | | |
| Air Temperature & Humidity Sensor Module | Pilot | 23.95 | 1 | 23.95 | Temperature & Humidity Sensor | n | AM2315 - Encased I2C Temperature/Humidity Sensor for Raspberry Pi/ Arduino | 23.95 | 1 | 23.95 | Amazon Prime |
| Manual Nutrient Sensor Module | Pilot | 21.75 | 1 | 21.75 | EC Meter | n | HeathyWiser Digital TDS EC Meter, Professional-Grade Water Test Kit Tests Water Quality in Drinking Water, Aquariums and More, Purple, Includes Protective Leather Case & Protective Cap | 21.75 | 1 | 21.75 | Amazon Prime |
| Manual pH Sensor Module | Pilot | 5.5 | 1 | 5.5 | pH Strip | y | Litmus pH Test Strips, Universal Application (pH 1-14), 2 Packs of 100 Strips | 5.5 | 1 | 5.5 | Amazon Prime |
| Actuator Modules | | | | | | | | | | | |

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| Grow Light Module | Pilot | 72.98 | 1 | 72.98 | Grow Light | n | Erlegpowht 45W LED Red Blue Hanging Light for Indoor Plant | 34.99 | 1 | 34.99 | Amazon Prime |
| | | | | | Long Black Jumper Wire | n | Included in Wiring Starter Pack Pilot Module | 0 | 1 | 0 | None |
| | | | | | Long Blue Jumper Wire | n | Included in Wiring Starter Pack Pilot Module | 0 | 1 | 0 | None |
| | | | | | Powerswitch Tail | n | PowerSwitch Tail II | 37.99 | 1 | 37.99 | Amazon Prime |
| Air Vent Module | Pilot | 26.64 | 1 | 26.64 | Fan | n | Bgears b-Blaster 120mm 2 Ball Bearing High Speed Extreme Airflow Fan | 10.89 | 1 | 10.89 | Amazon Prime |
| | | | | | Fan Guard | n | 5 Pcs Silver Tone Axial Fan Grill Protector 12cm Metal Finger Guards | 5.45 | 1 | 5.45 | Amazon Prime |
| | | | | | Louver | n | Lambro 2676W White Plastic Louvered Vent, 4-Inch | 5.15 | 2 | 10.3 | Amazon Prime |
| Humidifier Module | Pilot | 16.96 | 1 | 16.96 | Humidifier | n | Ellen Tool Mini Portable Bottle Cap Air Humidifier with USB Cable for Office Home (Blue) | 9.29 | 1 | 9.29 | Amazon Prime |
| | | | | | Micro-USB Cable | n | Included in Humidifier Item | 0 | 1 | 0 | Amazon Prime |
| | | | | | Humidifier Wick | y | Included in Humidifier Item | 0 | 1 | 0 | Amazon Prime |
| | | | | | Humidifier Reservoir | n | Use Recycled Water Bottle | 0 | 1 | 0 | None |
| | | | | | 2-Channel Easy Connector | n | Included in Wiring Starter Pack Pilot Module | 0 | 2 | 0 | Amazon Prime |
| | | | | | Inline 12V-to-5V Step-down Regulator | n | Nextrox DC/DC Converter 12V Step Down to 5V 3A Power Supply Module | 7.67 | 1 | 7.67 | Amazon Prime |
| Water Circulation Module | Pilot | 7.99 | 1 | 7.99 | Water Circulation Pump | n | VicTsing 80 GPH (300L/H) Submersible Water Pump For Pond, Aquarium, Fish Tank Fountain Water Pump Hydroponics with 4.9ft (1.5m) Power Cord | 7.99 | 1 | 7.99 | Amazon Prime |
| Water Aeration Module | Pilot | 12.58 | 1 | 12.58 | Air Pump | n | Tetra Whisper Air Pump (Non-UL) | 6.99 | 1 | 6.99 | Amazon |
| | | | | | Air Stone | n | uxcell® Aquarium Fish Tank Bubble Diffusers Maker Round Air Stones | 1.49 | 1 | 1.49 | Amazon |
| | | | | | Air Tubing | n | Lee's Airline Tubing, 8-Foot, Standard | 4.1 | 1 | 4.1 | Amazon Prime |
| Liquid Doser Module | Pilot | 48.68 | 1 | 48.68 | Peristaltic Pump | n | Homecube 12V DC Peristaltic Liquid Pump Miniature Dosing Pump Hose Pump for Aquarium Lab Analytical Water | 17.99 | 1 | 17.99 | Amazon Prime |
| | | | | | Food Safe Tubing | n | White SiliconeTubing, 1/8"ID, 3/16"OD, 1/32" Wall, 10' Length | 9.71 | 1 | 9.71 | Amazon Prime |
| | | | | | Mini-Grabber Cable | n | Elenco Mini-Grabber to Mini-Grabber Test Lead Set | 8.99 | 1 | 8.99 | Amazon Prime |
| | | | | | Storage Bottle | n | Nalgene Wide Mouth Rectangular Bottle (64-Ounce) | 11.99 | 1 | 11.99 | Amazon Prime |
| Manual pH Doser Module | Pilot | 21.68 | 1 | 21.68 | pH Up Solution & pH Down Solution | y | Hydroponic pH Up and Down Control Kit - 2 pints (16oz each) | 14.69 | 1 | 14.69 | Amazon Prime |
| | | | | | Pipettes | y | KINGLAKE® Plastic Graduated Transfer Pipettes 3ML Pack of 100 Makeup Tool 100% Customer Satisfaction Guarantee | 6.99 | 1 | 6.99 | Amazon Prime |
| Manual Nutrient Doser Module | Pilot | 12.2 | 1 | 12.2 | Nutrients | y | General Hydroponics KoolBloom for Gardening, 4-Ounce | 12.2 | 1 | 12.2 | Amazon Prime |
| Assembly Modules | | | | | | | | | | | |
| Wiring Starter Pack Module | Pilot | 60.94 | 1 | 60.94 | Red Hookup Wire | y | Grand General 55241 Red 14-Gauge Primary Wire | 6.49 | 1 | 6.49 | Amazon |
| | | | | | Black Hookup Wire | y | Grand General 55240 Black 14-Gauge Primary Wire | 6.49 | 1 | 6.49 | Amazon |
| | | | | | Jumper Wire Assortment | y | Honbay® 120pcs Multicolored 40pin Male to Female, 40pin Male to Male, 40pin Female to Female Breadboard Jumper Wires Ribbon Cables Kit | 7.97 | 1 | 7.97 | Amazon |
| | | | | | Easy Connector Assortment | y | Wago (25) 222-412 (25) 222-413 (20) 222-415 Lever-Nut Assortment Pack | 39.99 | 1 | 39.99 | Amazon |

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| Tool Starter Pack Module | Pilot | 39.28 | 0 | 0 | Wire Stripper | n | Bastex, 2 in 1 Self Adjusting Wire Cutting Stripper Tool. Duckbill/Eagle Nose Pliers Adjustable Cable Wire Stripper/Cutter. 0.2mm-3.3mm cutting range. for small electrical, automotive Repair | 12.99 | 1 | 12.99 | Amazon Prime |
| | | | | | Wire Cutter | n | Hakko CHP-170 Micro Soft Wire Cutter, 1.5mm Stand-off, Flush Cut, 2.5mm Hardened Carbon Steel Construction, 21-Degree Angled Jaw, 8mm Jaw Length, 16 Gauge Maximum Cutting Capacity | 4.97 | 1 | 4.97 | Amazon Prime |
| | | | | | Small Screwdriver Set | n | TEKTON 2974 Long Precision Screwdriver Set, 6-Piece | 9.37 | 1 | 9.37 | Amazon Prime |
| | | | | | Large Screwdriver Set | n | Stanley 60-020 2-Piece Standard Fluted Screwdriver Set | 2 | 1 | 2 | Amazon Prime |
| | | | | | Utility Knife | n | Bills Bargain House Utility Knife with Stainless Steel Breakaway Blades, Pack of 12 | 9.95 | 1 | 9.95 | Amazon Prime |
| Kitting Module | Pilot | 8.89 | 0 | 0 | Antistatic Bags | n | Antistatic Bags, Resealable, 8X12, 10 Pack | 8.89 | 1 | 8.89 | Amazon Prime |