

DATE : 19 August 2022
TO : Engr. Christian B. Hernandez
FROM : Engr. Joseph Duke Amuan
SUBJECT: Quotation of Electronic Components

Dear Sir,

Good day!

Kindly refer to the quotation below and the attached Bill of Components for our common reference.

Bill of Components

	ITEM / DESCRIPTION	UNIT PRICE (Php)	QUANTITY	AMOUNT COST (Php)
1	Laptop Acer Nitro 5 50YE i5 8gb 512 SSD RTX 3050 15.6" FHD IPS 144Hz	60,000	2	120,000.00
2	Printer Epson L3110 Eco-Tank 3-in-1	12,500	1	12,500.00
3	Perimeter Fence and Tower	125,000	2	250,000.00
4	Perimeter Fence and Pole at Bridge Outlet	50,000	1	50,000.00
5	Arduino-based Synoptic Weather Station	726,854	2	1,453,707.62
	<i>Point to Point AP Wireless Bridge 5GHz</i>			
	<i>Lan Cable CAT6 Outdoor Cable 300 meter+</i>			
	<i>RJ 45 Pass Through 25 pieces</i>			
	<i>Pass Through Crimper</i>			
	Branded Desktop PC Processor: 10th Gen Intel® Core i5-10400 (12 MB cache, 6 cores, 12 threads, 2.90 GHz to 4.30 GHz Turbo) Memory: 8GB, 1 x 8 GB, DDR4, 2933 MHz Storage: 256GB, M.2, PCIe NVMe, SSD O.S.: WINDOWS 11 HOME Graphics: UMA GRAPHICS MS OFFICE HS 2021 -Keyboard and Mouse 22 inched 1080p monitor			

Arduino Uno Wifi R2	ATmega4809 (datasheet),5V, INPUT VOLTAGE 6 - 20V,DIGITAL I/O PINS14 — 5 Provide PWM Output,PWM DIGITAL I/O PINS 5, ANALOG INPUT PINS 6, DC CURRENT PER I/O PIN 20 mA, DC CURRENT FOR 3.3V PIN 50 mA, FLASH MEMORY 48 KB (ATmega4809) SRAM 6,144 Bytes (ATmega4809) EEPROM 256 Bytes (ATmega4809) CLOCK SPEED 16 MHz RADIO MODULE u-blox NINA-W102 (datasheet) SECURE ELEMENT ATECC608A (datasheet), INERTIAL MEASUREMENT UNIT LSM6DS3TR (datasheet), LED_BUILTIN 25 LENGTH 68.6 mm WIDTH 53.4 mm WEIGHT 25 g			
Anemometer Wind Speed Sensor	Output: 0.4V to 2V Testing Range: 0.5m/s to 50m/s Start wind speed: 0.2 m/s Resolution: 0.1m/s Accuracy: Worst case 1 meter/s Max Wind Speed: 70m/s			
Temperature Humidity Sensor SHT20 I2C Waterproof Probe	Brand Name : DFRobot Origin : Mainland China Type : Cable Adapter Certification : CE			
Rika RK200 04 RS485 Output Solar Radiation Sensor Pyranometer	Spectral range 300~1100nm Supply 5V,12-24VDC Range 0-1500W/m2 Resolution 1W/m2 Output 0-5V,4-20mA,RS485 Response time ≤5s Cosine correction ≤±10%(Solar elevation angle=10°) Non-linear ≤±3% Temperature effect ±0.08%/°C Stability ≤±2%/year Operating Temperature -40°C-+80°C Ingress Protection IP65 Weight(unpacked) 420g Shell material Aluminum alloy Storage Condition 10°C-60°C@20%-90%RH			
Wind Direction Sensor	Material: aluminum alloy For: Wind direction sensor / weather station Product Type: Six elements of meteorology Interface type: RS485 Measuring range: 0 ~ 360 ° Accuracy: ±3° Starting wind speed: ≤0.5m/s Power supply mode: DC Output form: current 4~20ma voltage 0~5V 0~10V RS485 Instrument line length: standard: 2.5 meters Load capacity: current type output impedance ≤250Ω Voltage type output impedance ≥1KΩ Working environment: temperature -40 ° C ~ 50 ° C humidity ≤ 100% RH Protection level: IP45 Cable grade: temperature grade: 80 ° C Rated voltage: 300V Product power consumption: 5.5mW Wind direction measurement range; 16			

		<p><i>orientation</i> <i>Wind direction measurement accuracy: 1 position</i> <i>Response time: less than 5 seconds</i> <i>Baud rate: 9600</i> <i>Communication port: RS485</i> <i>Power supply: 12V-24V DC</i> <i>Power consumption:</i> <i>Operating temperature: -30-80 ° C</i> <i>Operating humidity environment: 0-100% RH (15-95% RH)</i> <i>Size: Approx. 16*23cm/6.3*9.06in</i></p>			
	<p><i>Tipping Bucket Rain Gauge Meter Sensor</i></p>	<p><i>Max: 8mm/min</i> <i>Resolution 0.2mm(6.28mL)</i> <i>Accuracy(2mm/min) ±4%</i> <i>Output Pulses,RS485(12-24VDC supply)</i></p>			
	<p><i>Ultrasonic Water Level Sensor and Water Velocity Monitoring System</i></p>	<p><i>Ranges: 0.33 to 3 ft; 0.33 to 12 ft; and 1 to 48 ft</i> <i>Resolution: 0.009 in, 0.035 in, and 0.141 in</i> <i>Repeatability: Greater of ±0.03 inches (0.76 mm) or 0.1% of range @ constant temperature</i> <i>Accuracy: Better than 0.5% of range @ constant temperature;</i> <i>affected by temperature gradients, target echo strength, and</i> <i>speed of sound in vapors</i> <i>Transducer Type: Ruggedized piezoelectric</i> <i>Beam Angle: 12° conical shaped pattern</i> <i>Power: 3 and 12 ft range: 10 to 30 VDC @70 mA max</i> <i>48 ft range: 10 to 30 VDC @40 mA max</i> <i>Output: 4-20 mA (4 mA is minimum water level and 20 mA is maximum water level)</i> <i>Update Rate: 50 ms</i> <i>Operating Temperature: -40 to 158°F (-40 to 70°C)</i> <i>Humidity: 0 to 100% (avoid heavy condensation)</i> <i>Housing Material: 303 stainless steel</i> <i>Dimensions:</i> <i>3 and 12 ft rng: 4.062 in. long x 1.05 in. dia. (103.2 L x 26.7 Dia mm)</i> <i>48 ft range: 4.75 inch long x 2.375 inch dia. (121 L x 60 Dia mm)</i> <i>Weight:</i> <i>3 and 12 ft range: 12.7 oz (0.36 g)</i> <i>48 ft range: 25.9 oz (0.73 kg)</i> <i>IP rating: IP 68, Nema 4X</i></p>			

Large Volume Soil Moisture Sensor	<p>Product Name: Capacitive Soil Moisture sensor Probe type: Probe electrode Measurement parameters: Soil moisture value Moisture Measuring range: 0 ~ 100%(m3/m3) Moisture Measurement accuracy: ±5% (m3/m3) Voltage output: 0-3V output Output signal with wireless: A:LORA/LORAWAN B:GPRS C:WIFI D:NB-IOT Supply voltage: 5V DC Working temperature range: -30 ° C ~ 70 ° C Stabilization time: <1 second Response time:<1 second Sealing material: ABS engineering plastic, epoxy resin Waterproof grade: IP68 Cable specification: Standard 1 meters (can be customized for other cable lengths, upto 1200 meters)</p>			
	Solder less PCB Breadboard MB102 830			
	20 x 4 LCD Display White on Blue			
	60 x 36 x 25 mm Waterproof Plastic Electric Project Junction Box			
	Sandisk Ultra Micro SDHC Class 10 UHS-I 64GB			
	Micro SD Card Module			
	120 pcs. 20 cm 2.54mm Dupont Jumper Wire Cables (M-M, M-F, F-F)			
	Soldering Iron Kit 60W Adjustable Temperature Welding Soldering			
	DS3231 RTC High Precision Real-Time Clock Module w/ AT24C32 EEPROM			
	Automatic Wire Stripper Cutter Stripper Crimper Pliers Crimping Terminal Hand Tool Cutting and Stripping Wire Multitool			
	Ultrasonic Sensor Distance Measuring Module HC-SR04			
SMD Hot air Rework station SET	AC 220v (60hz) Power consumption 270w temp.Controlrange:10-450°C			
Soldering iron Set	AC : 220V Soldering iron 60W Adjustable Temp. Soldering			
Soldering lead Wire	soldering lead tamagawa 1.0mm,102mm			
Soldering lead Wire	Rubicon Soldering Lead 60/40 0.2m/60/50 Soldering wire			
soldering paste	10g Rosin soldering Flux paste soldering iron paste			
wick wire lead remover	3.5 mm length desoldering solder wick wire lead desoldering braid welding solder remover wick wire lead			
wick wire lead remover	2.5mm length desoldering solder wick wire lead desoldering braid welding solder remover wick wire lead			
Soldering lead Wire	Rubicon Soldering Lead 60/40 0.8m/6040 Soldering wire			
Mechanic solder paste	welding flux XG-50 SMD SMT Soldering 42g			
3 hand Soldering Iron Stand	Clamp 3x 4.5x welding Magnifying Glass w/ led 360° rotate 3 hand soldering iron stand			

Insulated Electrician Pliers Cutter Set	8" 200mm & 6" Pliers 170mm wire Cutters 170mm diagonal Pliers 170mm needle nose Pliers		
digital Multi tester	ANENG AN113D Handheld digital multi tester LCD w/ AC / DC Voltage		
High precision clamp multi tester	YN Digital Multi tester AC/DC Multi tester clamp Multi meter Multifunctional Voltage meter		
multi tester	sanwa YX360TRF Analog Multi tester Multi meter		
magnet wire	magnetic wire AWG 21./ 1KILO		
magnet wire	magnetic wire AWG 16. /1KILO		
torroid	20mm torroid ferrite ring core		
magnet wire	magnetic wire AWG 14. /1KILO		
fast wire stripper	fast wire stripper		
polymide tape	heat resistant high temp. insulation electronics polymide tape 33m a4:40mmx33mm		
polymide tape	heat resistant high temp. insulation electronics polymide tape 33m a3:30mmx33mm		
Shrinkable tube ASSORTED	164/328/530 pcs heat shrink shrinkable heatshrink tube assortment electronic Wrap Wire cable polyol		
Screw Driver set 8pcs. SET	(Flat and Philips Screw diver)		
THHN STRANDED WIRE	thhn stranded wire 14mm		
car automotive wire	30 m. roll size 18 any color 2 color		
car automotive wire	30 m. roll size 21 any color 2 color		
insulated terminal lugs	sv 1.25-4#22-18 1pck 100 pcs		
Terminal lugs assorted	box assortment SC6-25 Bare Tinned Copper lug Terminals Ring Wire connector		
solar panel	100 WATTS MONO CRYSTALLINE		
solar panel	solar panel 200watts out door water proof mono crystalline		
wind generator	4000watts generator ac 12v to 24 volts turbine generator with 5 nylon fiber blades for solar back up		
Single phase 2-in 8 out	single phase 2-in 8 outgoing terminal box distribution box juncktion		
dc circuit breaker	Ac Circuit breaker DC circuit breaker 10 amp.2 pole SPD B		
dc circuit breaker	Ac Circuit breaker DC circuit breaker 32 amp.2 pole SPD B		
pcb fuse holer	pcb fuse holder PCB mount 2 pins per pair		
Glass Quik Blow Fuse ASSORTED	FUSE 5x20 Fast Blow insurance tube 250V 0.5A 0.7A 1A 1.5A 2A 2.5A 3A 4A 5A 6A		
power transformer	Power tranformer step down 220v to 12 0 12 vac 1 amp		
power transformer	Power tranformer step down 220v to 12 0 12 vac 15 amp		
relay	5 volts relay		

relay	LY2NJ 12 volts relay coil LY2N-J 10A ac 220v coil power relay LY2NJ HH62P 8pins Socket		
Rectifier diode	200 pcs 10 values Rectifier diode assorted kit 1N4001/ 4002/ 4003/ 4004/ 4005/ 4006/ 4007		
Rectifier diode	20 pcs. 30A BARRIER diodes rectifier for solar		
BRIDGE RECTIFIER DIODE	KBPC5010 SEP BRIDGE DIODE 50A 1000V		
rocker switch	Dual rocker switchbig with 6 pin heavy duty 25a		
Rectifier diode	20 pcs. 20A BARRIER diodes rectifier for solar		
Adjustable voltage reg.	LM317T adj. for power supply		
Voltage regulator	L7805 (5) V		
Voltage regulator	L7812 (12) V		
Voltage regulator	L7810 (10) V		
Voltage regulator	L7809 (9)V		
Voltage regulator	LD1117 (3.3) V		
resistor	860 pcs 1 ohm-1m ohm 1/4W film Resistors Assortment Kit 43 Values		
TRANSISTOR	tip3055 and tip2955		
TRANSISTOR	BC557		
mosfet	IRF3205PBF 55V 98A		
mosfet	IRF1404 162A/40V		
ic	TL494CN DIP 16 IC		
led	100 pcs assorted 3nn 5mm kit set f3 f5 led diy led set 5 colors white,yellow,red,green,blue		
pcb	fr4 pcb 10x15cm single side copper clad plate diy pcb kit laminated circuid board		
TORROID	33mm*19mm*11mm white iron core ferrite ring torroid		
universal pcb	5x7 pcb diy proto type pcb universal board yellow		
ferric chloride	ferric choride for pcb Etching 120 ml		
cat 6 utp cable	cat 6 utp cable outdoor solid cca net cable		
usb port	usb type A standardport female solder jack connector Pcb Socket usb type A		
terminal block	25 a Terminal Block molded type electrical 12 pairs		
terminal block	25 a Terminal Block molded type electrical 4 pairs		
male female socket adapter dc	female plug+male plug jack socket Adapter dc Power supply panel mount connector		
10 set micro jst 2.0 connector	sets micro jst 2.0 Ph Male Female Connector 2 plug with terminal wires cables socket		
10 set micro jst 2.0 connector	sets micro jst 2.0 Ph Male Female Connector 3pin plug with terminal wires cables socket		
10 set micro jst 2.0 connector	sets micro jst 2.0 Ph Male Female Connector 4pin plug with terminal wires cables socket		
10 set micro jst 2.0 connector	sets micro jst 2.0 Ph Male Female Connector 5pin plug with terminal wires cables socket		
10 set micro jst 2.0 connector	sets micro jst 2.0 Ph Male Female Connector 6pin plug with terminal wires cables socket		

10 set micro jst 2.0 connector	sets micro jst 2.0 Ph Male Female Connector 7pin plug with terminal wires cables socket		
10 set micro jst 2.0 connector	sets micro jst 2.0 Ph Male Female Connector 8pin plug with terminal wires cables socket		
10 set micro jst 2.0 connector	sets micro jst 2.0 Ph Male Female Connector 9pin plug with terminal wires cables socket		
10 set micro jst 2.0 connector	sets micro jst 2.0 Ph Male Female Connector 10pin plug with terminal wires cables socket		
usb port	double layer A Female -180 deg.		
resistor	0.1 Ohm 5 watts		
lightning arrester full set	full set lightning rods outdoor ground wire 15m, ground rod,copper lightning protection stainless steel lightning rod		
pe pipe	pe pipe 1/2*100m		
boost converter 15a	400w boost converter 15a dc-dc power converter boost module step up converter constnt current		
1200w high power dc to dc boost Converter	boost dc to dc 8-60v to 12v-80		
dc-dc step down module	stepdown module dc4.0-40v to1.25-37 adjustable regulator led volt meter buck adapter		
12 volts cooling fan	brushless 12 volts cooling fan		
volt meter	dc 60w 100A Balance Voltage Battery power analyzer Watt Meter		
heat sink	10 pcs 21x15x11mm black aluminum		
heat sink	6inch aluminum heat sink (suklay type)		
capacitor	10000uf 50V		
capacitor	470uf 50v		
capacitor	alum.electrolytic capacitor 10v 16v 25v 50v 0.1 to 1000 uf random 4 php		
UPS	(1500VA /900W) 220/VAC *4 OUTLET		
fuse	ANS-hbolt type fuse holder ANS-8 Safety Plate 30 amp hole black holder fuse		
fuse	ANS-hbolt type fuse holder ANS-8 Safety Plate 20 amp hole black holder fuse		
fuse	ANS-hbolt type fuse holder ANS-8 Safety Plate 15 amp hole black holder fuse		
battery	LVTOOPSUN SOLAR GEL BATTERY 12V 100 AH		
SOLAR BATTERY	SOLAR GEL BATTERY deep cycle lead acid 12v 200 ah 250 ah maintenance free		
lifep04 battery	32650 lifep04 battery optimum nano 3.2 rechargeable battery		
interconnect	copper busbar lifep04 interconnect for litium 3.2v Lifep04 for prismatic big battery etc. 40mm		
32650 lifep04 battery	32650 4*5 lifep04 battery holder bucket cell		
bms	power central lifep04 bms 12 v 30a 4s 3.2v		
battery meter	Multi function battery meter bms lcd digital capacity indicator volt meter		
THHN STRANDED WIRE	thhn wire mx#10 5.5 mm2 150m		
pull box electrical accessories	box metal enclosure nema 4 outdoor dust water proof big size		
solar inverter	Solar inverter snadi solar inverter toroidal wall mounted 12V 1000W SNAT Inverter		

outdoor junction	Outdoor junktion Box IP65 weather water proof with rubber gasket and screws high quality 100x100x70 (square)			
outdoor junction	Outdoor junktion Box IP65 weather water proof with rubber gasket and screws high quality 150x110x70 (square)			
weather proof box	400x350x120mm waterproof weather proof outdoor enclosure square junction box			
dc circuit breaker enclosure	2 way dc circuit enclosure for outdoor			
relay module	power supply 12v to 48v board relay module power off protection module automatic switching module ups			
solar charge controller	scc SRNE MPPT 40 amp mf4860 series 12/24v 48v solar charge controoler			
Cable gland	M20/ 20MM Waterproof Compression Cable stuffing gland lock			
cable tie	nylon cable tie high qua;ity white			
multi purpose locking cable	metal zip ties stainless steel self locking zip tie/ cable tie			
terminal box	Single phase 2-in 6/8 out wiretrminal box distributiun box			
mini bench drill for pcb diy	eagle villa 710W mini metal electric bench dril 0.3-1.2mm 0.6mm 1.1 to 2.0 mm pcb drill bit			
drill bit	0.3-1.2mm 0.6mm 1.1 to 2.0 mm pcb drill bit			
DRILL	makita cordless drill set			
GRINDER	makita 2 in 1 power tools grinder and drill in a box			
sealant	silicone sealant			
thermal paste	thermal grease paste HY510 for cpu gpu ic heatsink			
TOTAL				1,886,207.62

Should you have other inquiries, please don't hesitate to call our attention immediately.

LEAD TIME	14-45 days
CONTACT NO.	0966-239-4341
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Thank you for giving us the opportunity to serve you.

Prepared by:

Engr. Joseph Duke Amuan

