ALL IN ONE INTERGRATED SOLAR STREET LIGHT TECHNICAL SPECIFICATIONS (150W)

1	Solar panel	Max Power	Monocrystalline Silicon Solar Panel (Not less than 100W 18V)
		Life Time	≥ 25 Years
2	Battery	Type	Lithium-Ion Phosphate battery (Life PO4)(at least 12V/24V,75AH)
		Life time	Minimum 5 years
3	LED Lamp (Replaceable lamp source with sensor)	Max Power	150W
		Lumen	≥ 12000 LM
		Color Temp	6000-6500k
		LED Chip	Bridgelux
		Life Time	> 60000Hrs
		Sensing distance (M)	15-25 M
4	Solar Charge controller	Intelligent controller with MPPT technology	
5	Working Mode	Intelligent Control mode	Automatic switching ON/OFF, 12hrs/night with 2 nights back up
6	Charge Time	By Sun	Below 10 Hrs to be fully charged
7	Discharge Time	Full Power	> 9 Hrs
		Half Power	> 15 Hrs
8	Working Temperature	Range(ºC)	-20ºC-70ºC
9	Charging temperature	Range	-20ºC – 60ºC
10	Mounting Height	Range (M)	8- 10 M above the ground
11	Space between light	Range (M)	30-35 M
12	Main Lamp Material	Aluminium Alloy	
13	Installation bracket	Bracket to fit dimension 115mm*115mm top of concrete pole	
14	Remote Control	Should have a remote control	
15	Warranty Period	Atleast 3 Years	
16	Protection level	IP66	
Pictures of the Solar light to be supplied should also be provided			

CONCRETE POLE

1	Concrete grade 35/20 (35MPa) for the concrete poles.
2	Pre-stressed concrete poles with smooth finish.
3	Quarry dust to be used as fine aggregate for concrete. (Don't use river sand)
4	Use combination of 20mm and 10mm quarry stones as course aggregate in ration of 1:1

5	4 T16 reinforcement high yield steel bars overlapping along the length of the pole, 25mm concrete cover to reinforcement bars
6	R8 bars to support the reinforcement bars spacing at 300mm C/C.
7	Concrete footing of class 40/20 (40MPa), 200mm thickness.
8	Installed hooks for lifting purposes along the length of the pole as indicated in the drawing.
9	Underbracing members precast together with the pole for anchoring the pole under the ground.
10	Pole sizing of 115mm by 115mm at top and 270mm by 270mm at bottom
11	Concrete Cube tests for all concrete works.
12	Steel hooks to be cast together with concrete on 2000mm and 4500mm from the top of the pole.
13	Excavation holes dag 1500mm by 600mm by 600mm from the ground surface
14	Conduit inset of 20mm diameter PVC on first hole 300mm from top and second hole 425mm put parallel along the centre line of the pole.
15	Contractor to provide trial mix design for the concrete to Project Manager for approval from reputable laboratory which is stamped and signed by the laboratory personnel.