Dual axis solar specifications

Area	Description
System Nameplate	
System rated for	4.4Kwh DC approx 3.9Kwh AC (due to 90 minutes shaded areas affecting the array in the AM and 90 minutes in the PM)
Delivered voltage	240 VAC single phase
Annual production on first year cycle	1 Mwe AC monthly average at 34 deg. Latitud north
Distance from solar array to load main center	170 feet
Civil and structural	
Foundation	32" diam X 90" deep
Anchor bolts	8 each T shaped configured
Column	1 each 8", 5'-0" long pipe
Column base plate	1 each 3/4" Plate material
Column plate gussets	8 each 3/8" plate material
Column height at pivot point	6'-6" bottom of column base plate to pivot point
Array data	
Array dimensions	29' long X 13' wide to the nearest foot
PV module surface	353 s/f
PV module module quantity	20 ea. Four rows X five columns
PV module orientation	Landscape
Load on column	938 lbs including base and mechanical drive with associated hardware
Array low / high point elevations	1'-2" lowest point 13'.5" highest point at 73 deg. when washing PV panels and briefly at sunrise and sunset hours
Array movement	
Azimuth equipment	12" mechnical drive, warranted for 20 years
Zenith equipment	Electrical actuator, warranted for 8 years
Azimuth movement	Set at 240 deg. Max 320 deg.
Zenith movement	0-70 deg. Max 80 deg.
Array wind protection	Set at 26 MPH at 0 deg. (parallel to the ground) when winds reach 26 MPH and above)
Wind speed assesment	Via dedicated anemometer
Vertical angle	Measured by 3 axis type inclinometer
Electronic controller	Controlls variable Azimuth, Zenith angles, emergency position angle and PV washing position
Enclosure for electronic components	NEMA 4 type
PV module data	
PV module brand and quantity	20 each Evergreen model ES-E-220-fc3 warranted for 25 years.
PV module weight	42.9 lbs each
PV module type	120 cells Multi-crystaline string ribbon type
PV module output terminal type	MC4 connector type
PV module efficinecy	13.43% peak efficiency
PV module hailstone impact lab test	51.5 mph / 83 kmh per IEC61215
PV module watts rating	220 watts DC
PV module volts rating	24 VDC
Inverter type	20 each Micro-inverters (decentralized system and parallel connected)
Array management	
Power output reporting	By Remote ethernet connection via communications gateway
Controller diagnostics	By annual subscription thru controller manufacturer.