## **Group 09 – Solar Power Plant**

Sensor ID	Sensor Name / Type	Publishing Range	Publishing Interval (Seconds)	Remarks
Power_Gen (kW)	Power sensor	Min = 300 kW Max = 1000 kW	20	Power generation in the powerplant
Temp01	Temperature sensor	Min = $18  {}^{\circ}\text{C}$ Max = $40  {}^{\circ}\text{C}$	21	Indoor temperature
Temp02	Temperature sensor	Min = $40  {}^{\circ}\text{C}$ Max = $80  {}^{\circ}\text{C}$	19	Temperature near generators
Humidity01	Humidity sensor	Min = 30 % Max = 100 %	23	Humidity level near the generators
Humidity02	Humidity sensor	Min = 50 % Max = 100 %	12	Outdoor humidity near the panels
Wind_Speed	Anemometer	Min = 10 km/h Max = 100 km/h	17	Outdoor wind speed
Wind_Direction	Anemometer	N, NE, E, SE, S, SW, W, NW	27	Wind direction around the plant
Light_Intensity01	Light intensity sensor	Min = 0 lx Max = 65535 lx	11	Outdoor light intensity around panels
Light_Intensity02	Light intensity sensor	Min = 100 lx Max = 3000 lx	13	Light intensity around inverters.
Battery_Capacity	Electronic power sensor	Min = 5 kWh Max = 25 kWh	29	Battery charging indicator
Alarm Temperature	Temperature sensor	Lower than 30 °C or higher than 60 °C	Non-Periodic	Alarm triggering when the temperature is out of specified range.
Alarm Light Intensity	Light intensity sensor	Higher than 50000 lx	Non-Periodic	Alarm triggering when the intensity is higher than the specified value.