

Plant	
plant_id 🔗	integer
plant_name	varchar
location_x	double
location_y	double
installed_power_kw	double
commission_date	date

Inverter	
inverter_id 🔗	integer
plant_id 🔗	integer
name	varchar[50]
rated_power_kw	double
efficiency_percent	double

PV_Module	
module_id	int
plant_id 🔗	int
type	varchar(50)
power_w	double
tilt_deg	double
orientation	varchar(20)

Sensor_data	
record_id	int
plant_id 🔗	int
temperature_c	double
timestamp	timestamp
dc_power_kw	double
ac_power_kw	double
energy_kwh	double

User	
user_id 🔗	int
username	varchar(50)
role	varchar(20)
email	varchar(20)
password	text

Weather_Data	
record_id 🔗	int
station_id 🔗	int
timestamp	timestamp
temperature_c	double
humidity_percent	double
wind_speed_mps	double
solar_radiation_wm2	double
precipitation_mm	double

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