



# **DP1 Diesel Pump Controller**

The Smart Farm Diesel Pump Controller can monitor and control any diesel pump with an analog-gauge-based Murphy Panel. We do not replace nor disconnect the Murphy panel, but rather, connect to it to monitor gauge faults and to turn the pump off.

### Features for efficient farming

The DP1 Diesel Pump Controller can turn a diesel pump off, monitor the battery voltage, tachometer, Murphy panel gauge fault, fuel level and consumption (with our optional fuel level sensor) and flow rate (with our optional flow meter) and more.

### Improved reliability

Continuous monitoring of field pumps is the most effective technique to insure efficient farm operation, help prevent unexpected pump failures, reduce repair costs and downtime, and provide early warning to avoid potential crop loss.

# Reduced ground water and fuel consumption

The DP1 allows the farmer to turn off a pump remotely based on a preset schedule, rain event, moisture or water level sensor trigger. No more driving out to a field during a lightening storm to shut down a pump.







# **KEY FEATURES**

- Remote and automated turn-off of diesel (no turn-on feature)
- Self-powered
- Pump side monitoring:
  - Water flow rate, flow start and stop times / flow rate variance alert
  - Daily, weekly and seasonal total volume of ground water extraction
- Fuel tank level / fuel consumption
- Engine run times / engine tachometer / speed variance alert
- Battery voltage / low voltage alert
- Murphy panel system fault
- Single water level input for monitoring zero grade rice fields



The DP1 provides monitoring and control for pumps that help prevent pump failure and reduce downtime.

## **SPECIFICATIONS**

Frequency: 900MHZ, 1W spread spectrum radio with AES-128 encryption

Power Source: 10W solar panel, internal 1600 mAH lithium ion battery, built-in charge converter with temperature sensing thermistor

#### Inputs/Outputs:

- 1 flow meter, 1 fuel sensor, 1 RPM,
- 1 battery set of Inputs
- up to 4 Murphy panel gauge kill signal inputs
- 1 water level sensor input
- 1 RJ-45 weather station interface
- 1 low voltage control signal output

Internal on / off switch, test buttons and LEDs for on-site diagnostics

Water resistant, UV stabilized ABS enclosure with removable door

Mounts on standard 4" PVC pipe

Mil-Spec conformal coated circuit board

FCC Part B, Class A Compliant

#### Offers two lengths for mast:

- DP1-8 eight ft. fiberglass mast; DP1-2 two ft. fiberglass mast
- Assembly includes:
  - 900MHZ whip antenna
  - Earth-grounded gas discharge lightning surge protection





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