

Solar wireless field station

Autonomous solar-powered irrigation



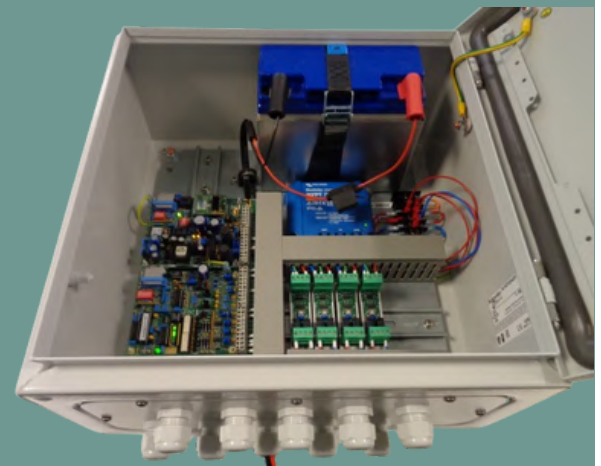
SERCOM has developed a universal power supply module. This module now also makes it possible to have wireless field stations operate as a stand-alone unit, powered by solar panels and batteries. This power supply is universal and can therefore not only be used in combination with Sercom equipment. It can also be used for other applications in combination with solar panels, batteries or other DC voltage sources.

This new power module is mainly intended for powering computer systems in situations where no mains power is available. You can think of situations where only a battery power supply is available with the aid of solar panels or a diesel pump, for example with irrigation systems in the open field. The power module provides an output voltage of nominal 28VDC. With this, both the electronics of the field station and any taps or relay boxes present can be powered.

The output voltage is stabilised and completely galvanically isolated from the power source. This is to increase the application possibilities and safety of battery-powered systems. A single module provides a maximum output power of 45W (1.6A).

In brief:

- Universal power module
- Wireless field stations
- Adjustable output power
- Energy-saving techniques
- Pulse valve method
- Analogue input measurements



Because the module is equipped with a unique thermal load launcher, multiple modules can simply be connected in parallel. This allows you to increase the total available output power as desired.

This power module is now available as part of a complete kit, integrated into a field station. This field station can be placed almost anywhere in the field.

In addition to the standard version of 28V/1.6A, different output voltages can also be supplied on request.

Pulse valve (Latch) module

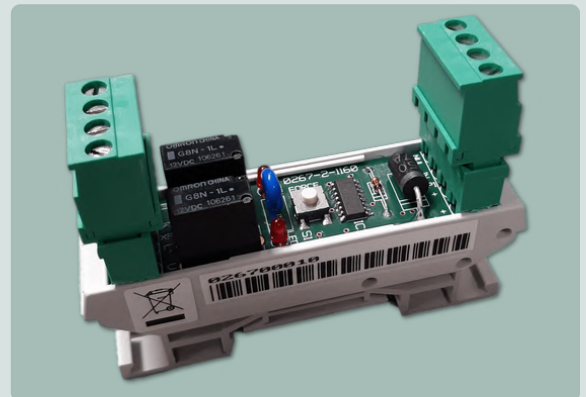
By using power-saving techniques, the field station can continue to operate for a maximum of one full week without recharging. This is only possible by using so-called pulse valves (Latch solenoids), which only draw current for a short time at the moment of switching. The pulse valve module required for this is the second new Sercom product to be introduced. This module can be clicked directly onto a DIN rail.

Analogue input measurements

What is also unique about this field station is that, in addition to the Digital outputs, there are also Analogue Inputs that are connected in real time to the main station. This makes it possible to install sensors in the field, such as a WET sensor (water content, EE and soil temperature), or another soil moisture sensor.

In the field station, for example, a battery status voltage measurement is connected to an analogue input, which provides insight into the power status of the battery. The battery voltage is a direct measure of the charge present.

Contact our sales department for more information.



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