

# SmartLevel

24V power supply station



SmartLevel series power stations are ideal for supplying power to all the devices located in the area protected by the detection system. They are completely supervised and fully approved to meet EN54 requirements. They have a new switching module with resonant technology and an internal CPU for reliable, efficient and secure power management.

Available in 2 versions:

SPS24060G and SPS24160G (respectively 1.5A and 4A) with LCD command screen for viewing the events log or fault details (low battery, mains failure, dispersion to earth, etc.) and the current draw of each output; provides 3 individually protected outputs with 4A current limit, connectible to the RS485 BUS of the fire detection panel.

SPS24060S and SPS24160S (respectively 1.5A and 4A) with status LEDs, fault output, mains fault output, single power output. Can be used as a stand-alone device or connected directly to the loop of an addressable control panel (Inim protocol). Thanks to its loop interface, it is recognized by the control panel as being a power station and therefore becomes completely and automatically supervised thus reporting all signals to the control panel.

The SPS24060x versions are capable of supplying up to 1.5A @ 27.6V and provide housing for two 12V –7Ah batteries; the SPS24160x versions are capable of supplying up to 4A @ 27.V and provide housing for two 12V –17Ah batteries.

The power stations have an independent battery-charging circuit capable of charging the batteries without affecting the output current to the load, and a thermal probe that adapts the battery charge in accordance with their operating temperature. The battery efficiency is assessed by accurately measuring the internal resistance (with 0.1 ohm resolution) of the batteries in such a way as to signal any decrease in efficiency that might jeopardize the system functionality in the event of mains failure.

The CPU contained in the innovative Switching module is the core of the apparatus and is capable of supervising all of its parameters (internal temperature, current supplied, output voltage, battery parameters, dispersion to earth) and guarantees a product of the highest quality.

## Main Features

- Input Voltage: 230Vac +10% -15% 50/60 Hz.
- Stability: above 1%.
- 3 outputs, each protected against short circuit and with a 4A current limit. (SPS24060G and SPS24160G version only)
- Graphic LCD, Buzzer, Current draw monitoring on each output, Events log for the last 50 events. (SPS24060G and SPS24160G version only)
- Directly connectible to the detection loop of the control panel (SPS24060S and SPS24160S versions only)
- Capable of connection to the RS485 BUS of the control panel for the supervision of the power supply station and control of the outputs (SPS24060G and SPS24160G versions only)
- Independent built-in battery charger with thermal probe for battery temperature measurement
- Battery supervision
- Deep discharge protection (disconnects batteries)
- Fault signal relay output
- Detection of dispersion-to-earth fault
- Certified CPD EN54-4



### SPS24060G

- LCD
- Connects to RS485 BUS
- Internal switching power-supply module 1.5A @ 27.6V
- Housing for two 7Ah, 12V batteries
- Dimensions (LxWxD): 325 x 325 x 80 mm.
- Weight (without batteries): 3 kg



### SPS24160G

- LCD
- Connects to RS485 BUS
- Internal switching power-supply module 4A @ 27.6V
- Housing for two 17Ah, 12V batteries
- Dimensions (LxWxD): 497 x 380 x 87 mm
- Weight (without batteries): 6 kg



### SPS24060S

- Connects to the detection loop
- Internal switching power-supply module 1.5A @ 27.6V
- Housing for two 7Ah, 12V batteries
- Dimensions (LxWxD): 325 x 325 x 80 mm.
- Weight (without batteries): 3 kg



### SPS24160S

- Connects to the detection loop
- Internal switching power-supply module 4A @ 27.6V
- Housing for two 17Ah, 12V batteries
- Dimensions (HxWxD): 497 x 380 x 87 mm.
- Weight (without batteries): 6 kg

## Power supply modules and boxed power supplies

INIM offers two switching power supply/battery charger units: the 1.5A model and the 4A model.

"In box" versions of both models are available. The "in box" version consists of a switching power supply module inside a metal enclosure that also provides housing for two 12V batteries. This solution is ideal for applications where supervision of all the power supply components is not essential. All models provide a thermal probe input. This device protects the batteries against overheating and successive damage by measuring the battery temperature and regulating the battery-charge voltage accordingly.

The switching module is based on a CPU that manages its own parameters (temperature, current, voltage), the battery charging operation (by means of an independent circuit) and supervises the batteries (voltage, internal resistance, etc.) and other parameters of the system (output current and voltage, dispersion to earth, etc.).

### IPS24060G - Power supply module @ 1.5A

#### BPS24060G - In box power supply module @ 1.5A

- CPU based power supply
- Input Voltage: 230Vac  $\pm$  15%, 50Hz
- Mains absorption: 0.4A
- Output Voltage: 27.6Vdc
- Maximum Current: 1.5Adc
- Stability: above 1%.
- Overload protection
- Short-circuit protection
- Independent built-in battery charger with battery charge adjustment in accordance with the battery temperature (ProbeTH thermal probe management).
- Metal enclosure
- Deep discharge protection (disconnects batteries)
- Detection of dispersion-to-earth fault
- Internal temperature management of switching module



IPS24060G



BPS24060G

#### BPS24060G model:

- Housing for two 7Ah, 12V batteries
- Dimensions (LxWxD): 325x325x80mm.
- Weight (without batteries): 3Kg

### IPS24160G - Power supply module @ 4A

#### BPS24160G - In box power supply module @ 4A

- CPU based power supply
- Input Voltage: 230Vac  $\pm$  15%, 50Hz
- Mains absorption: 0.9A
- Output Voltage: 27.6Vdc
- Maximum: 4Adc
- Stability: above 1%
- Overload protection
- Short-circuit protection
- Independent built-in battery charger with battery-charge adjustment in accordance with the battery temperature (ProbeTH thermal probe management).
- Metal enclosure
- Deep discharge protection (disconnects batteries)
- Detection of dispersion-to-earth fault
- Internal temperature management of switching module



IPS24160G



BPS24160G

#### BPS24140 model features:

- Housing for two 17Ah, 12V batteries
- Dimensions (LxWxD): 497x380x87mm
- Weight (without batteries): 6Kg

# POWER STATIONS AND MODULES

## ProbeTH



Attachment of the thermal probe (optional) to the control panel/power supply station allows the battery-charge voltage to be regulated in accordance with the battery temperature, this optimizes the charge voltage and results in longer battery life.

## ORDER CODES

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**SPS24060G:** 24V, 1.5A power supply station with LCD and RS485 connection capability

**SPS24160G:** 4V, 4A power supply station with LCD and RS485 connection capability

**SPS24060S:** 4V, 1.5A power supply station with LED status indicators and Inim Loop connection capability

**SPS24160S:** 4V, 4A power supply module with LED status indicators and Inim Loop connection capability

**IPS24060G:** 1.5A power supply module

**IPS24160G:** A power supply module

**BPS24060G:** In box 1.5A power supply module

**BPS24160G:** In box 4A power supply module

**ProbeTH:** Thermal probe