



# User Manual

Code: OPAL-PRO

DUAL TECHNOLOGY DETECTOR MICROWAVE + PIR **OPAL-PRO** SATEL

## Warning!

Please read the user manual included in this work as it contains important information related with safety of installation and use of the device.

Only persons who read the user manual may use the device.

The user manual must be kept because it may be required in the future. The device is to be used exclusively for purposes specified in this user manual.

The device must be unpacked prior to starting-up. After removing the packaging make sure the device is in working order.

If the product has defects, it should not be used until it is repaired.

The product is intended for use at home and commercial use and may not be used for other than intended use.

The manufacturer is not liable for damages resulting from not adhering to the rules contained in the user manual, therefore, we recommend to follow the aforementioned safety rules for operation and maintenance of the device. In this way you will ensure yourself safety and avoid causing damage to the device.

The manufacturer and the supplier are not liable for losses or damages arising out of the product, including financial or intangible losses, loss of profits, income, data, pleasure from use of the product or other products related with it - indirect, incidental or consequential loss or damage. The above provisions apply whether the loss or damage concerns:

1. Deterioration of quality or the lack of operation of the products or products related with it due to damage as well as the lack of access to the product when it is undergoing repair, which results in stoppage the loss of user's time or a break in business activity;
2. Improper results of operation of the product or products related with it;
3. It applies to losses and damages according to any legal category, including negligence and other losses, termination of a contract, expressed or implied guarantee and strict liability (even if the manufacturer or the supplier was notified about the possibility of occurrence of such damages).

### Safety measures:

Particular attention at designing was directed to quality standards of the device where ensuring safety of operation is the most important factor.

The device must be secured against contact with caustic, staining and viscous fluids.

The device was designed in such a way that it restarts operation when power supply is restored after a break.

**Attention! We recommend using protections to further protect the device from possible overvoltages in installations. Surge protectors are effective protection against accidental pass to the device voltages higher than the rated. Damages caused by pass the voltages higher than specified in manual, are not under warranty.**

Turn off the device before transporting it.

Prior to connecting the device to a power source check whether the supplied voltage is consistent with rated voltage specified in the user manual.

### Proper product disposal:

A marking of a crossed out waste bin indicates that the product may not be disposed together with other household waste in the entire EU. To avoid possible damage to the natural environment of health due to uncontrolled waste disposal, therefore, it should be handed over for recycling, propagating in this way sustainable use of natural resources.

To return a worn-out product, use a collection and disposal system of this type of equipment or contact a seller from whom it was purchased. He will then be recycled in an environmentally-friendly way.

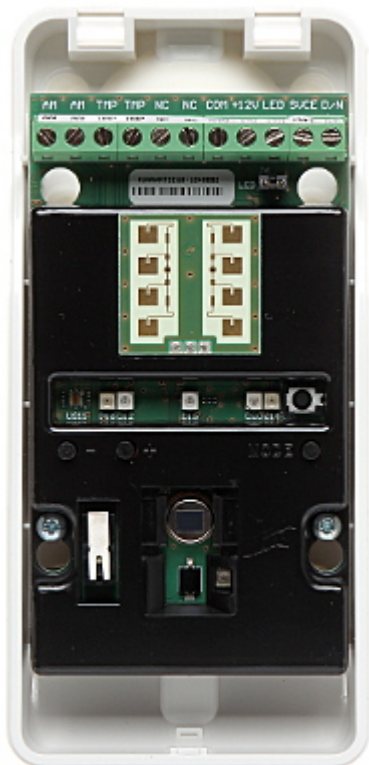
Digital dual technology detector equipped with PIR and microwave detection.  
The OPAL-PRO detector design meets the requirements of the EN 50131-2-4, Grade 3 standard. Thanks to this, this device can be used to protect the interior of objects which are particularly prone to burglary, where high degree of protection is required, among others in jewellery stores and in public buildings.  
The OPT-1 remote controller support. (Attention: remote controller is available to buy as a separate item).



Application:	Outdoor
Pyroelectric sensor:	Double
Sensor type:	Passive Infra Red (PIR) and microwave (MW)
Recommended installation height:	2.4 m
Range:	max. 12 x 15 m
Detection angle:	100 °
Sensitivity adjustment:	16-step - Control using the keys, Remote control
Alarm output:	NC
LED indication:	<ul style="list-style-type: none"> <li>• 4 s Green - MW detector</li> <li>• 2 s Red - Alarm signaling</li> <li>• 4 s Yellow - PIR detector</li> </ul>
Tamper output:	NC
Microwave frequency band:	24 GHz
Pet immunity:	≤ 20 kg
Antimask feature:	Active IR Anti-Masking
Alarm time:	2 s
Maximal outputs load:	<ul style="list-style-type: none"> <li>• 40 mA / 16 V DC - Relay output</li> <li>• 50 mA / 12 V DC - Day/night mode, OC</li> </ul>

Digital temperature compensation:	✓
Protection class (Grade):	EN 50131-2-4, Grade 3
Environmental class EN 50130-5:	IIa
Power supply:	12 V DC / 20 mA
Operation temp:	-40 °C ... 55 °C
Target speed range:	0.3 ... 3 m/s
Color:	White
Main features:	<ul style="list-style-type: none"> <li>• "Index of Protection" - IP54</li> <li>• EN 50130-4, EN50130-5, EN 50131-1, EN 50131-2-4</li> <li>• digital detection algorithm with temperature compensation for high immunity to false alarms and repeatability of parameters</li> <li>• Immunity to environmental changes</li> <li>• Creep zone control</li> <li>• Tamper detection - opening the enclosure, removing from mounting surface</li> <li>• Twilight Sensor - Open Collector output (OC),</li> <li>• Remote management</li> </ul>
Weight:	0.180 kg
Dimensions:	139 x 65 x 58 mm
Manufacturer / Brand:	SATEL
Guarantee:	2 years

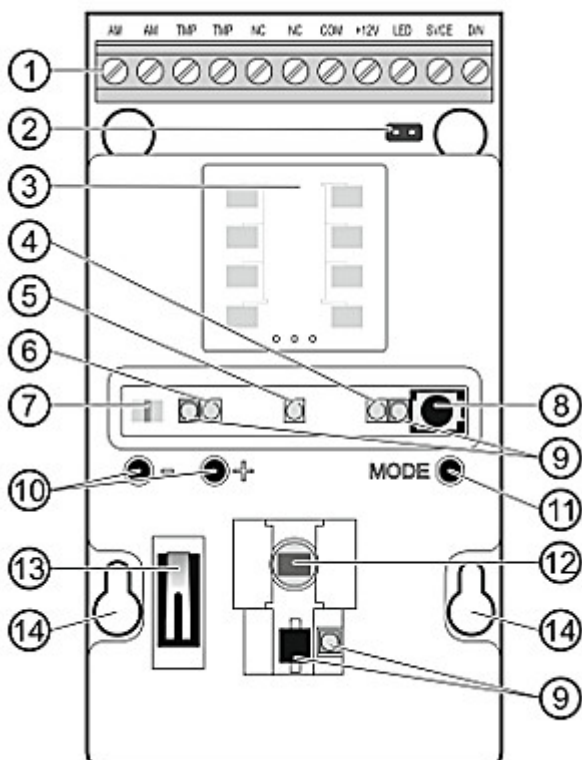
Internal view:



Connectors:



Description of particular elements of the device:



- 1. cable terminals
- 2. LED indication settings
- 3. MW detector

LED diodes

4. Yellow

5. Red

6. green

7. Twilight Sensor

8. IR receiver

9. Anti-masking system diodes

10. Manual configuration buttons

11. Manual configuration buttons

12. pyroelectric sensor

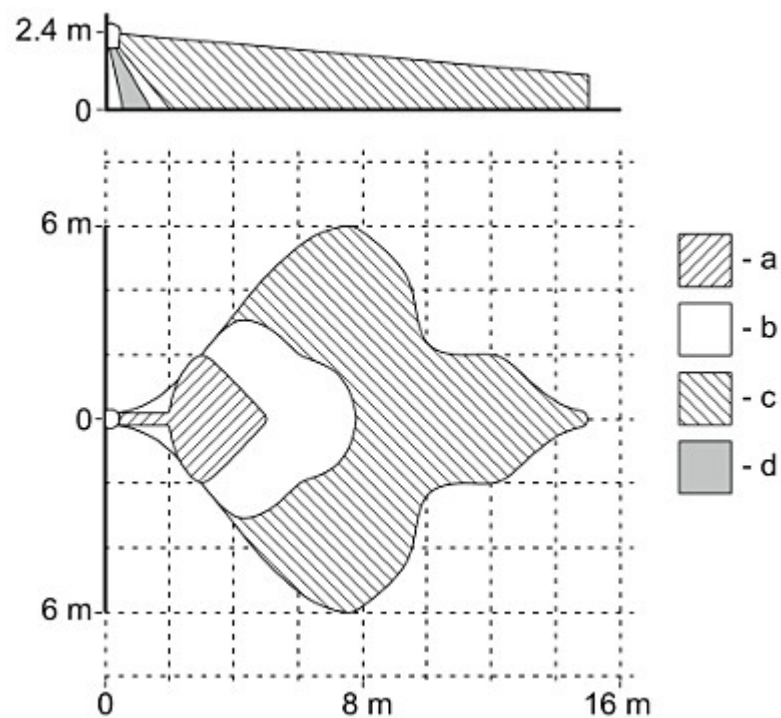
13. tamper contact

14. Mounting holes

Mounting side view:



Detector range:



a - Min.  
b - Default  
c - Max.  
d - Creep zone

## PACKAGE

Dimensions (L x W x H): 0x0x0 mm	Gross Weight: 0 kg
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