XENIT by ATEX

MADE IN ITALY

APID NG

Revamping in **N-TYPE** solar cell modules which require **grounding of the positive pole**.

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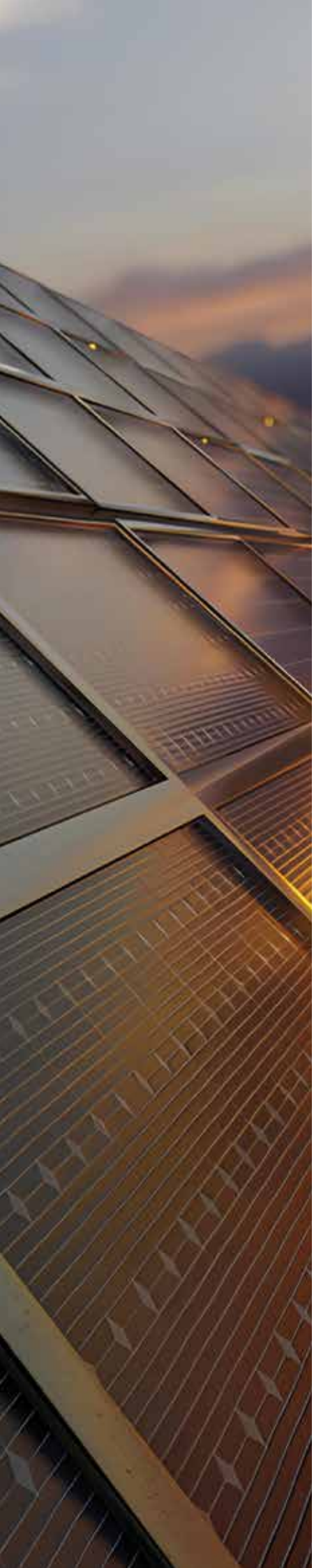
Xenit is a division of ATEX INDUSTRIES for Photovoltaic and Safety.



XENIT by ATEX

Xenit is engaged in the continuous research and development of **electronic devices for the revamping and management of photovoltaic energy**, as well as for the **safety and monitoring of AC and DC power lines**.

Discover our website

Photovoltaic Revamping

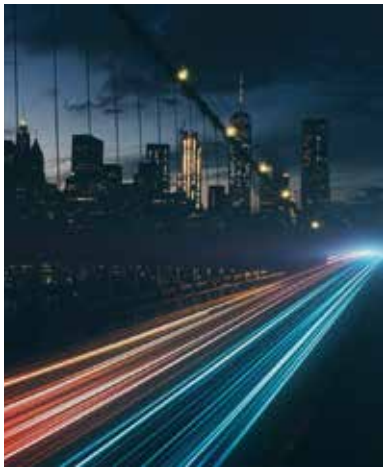
With the APID series of devices, we restore the power of PV systems affected by P.I.D., a degradation phenomenon that causes the progressive loss of power and consequent economic damage. On new systems APID prevents the onset of P.I.D.

Energy Management

MIA ENERGY is an automatic system that optimises the self-consumption of the energy produced by residential photovoltaic systems and improves the ability to consume the energy produced immediately and on site, shifting consumption to the peak phase of energy production.

Electric lines monitoring

The patented HELP series makes AC and DC power lines safe, monitoring the presence of cables, energy efficiency, status and the presence of loads. HELP is an advanced system, which can be integrated with IoT services, which recovers and shares information, facilitating predictive actions.

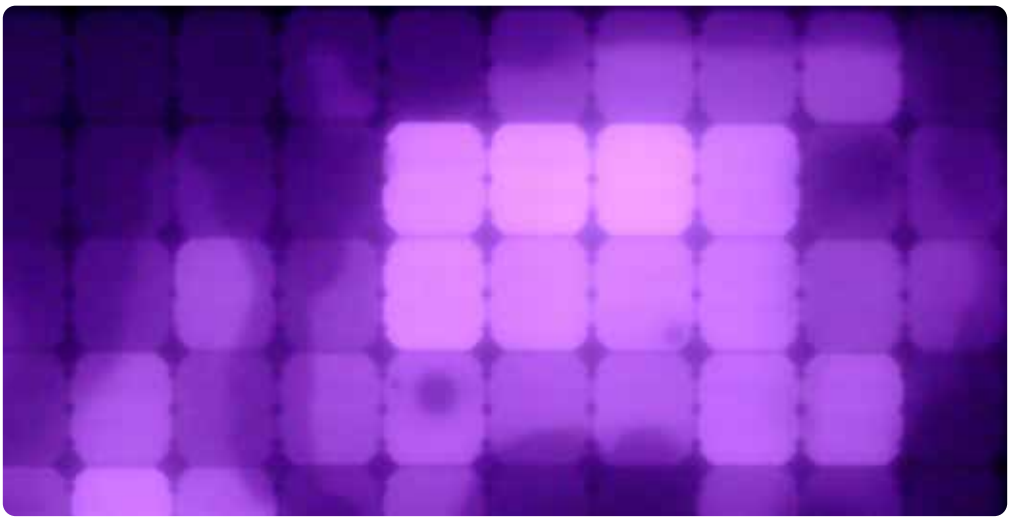


Replacing the inverters in N-TYPE solar cell modules

In photovoltaic systems with N-TYPE modules that **require grounding of the positive pole, the problem is replacing the inverters with a new generation**, which however do not allow this type of connection. The consequence, by installing a standard inverter without positive ground, is the progressive deterioration of the PV modules due to the P.I.D. phenomenon, with consequent loss of power and also the need for their replacement.

P.I.D. effect and loss of power in N-Type photovoltaic modules

In this image, taken with the electroluminescence technique, you can see the cells of the photovoltaic modules, which **are gradually shutting down**. P.I.D. effect on N-TYPE photovoltaic modules, after replacing the **inverter with one of the latest generation without positive ground**.



The solution

APID-NG

Maintain the efficiency of N-TYPE modules

APID-NG allows the replacement of the old inverter with a standard one of any brand, maintaining the current N-TYPE modules and their efficiency. APID-NG is suitable for any size of plant and it's easy to install.

How APID-NG works

Features

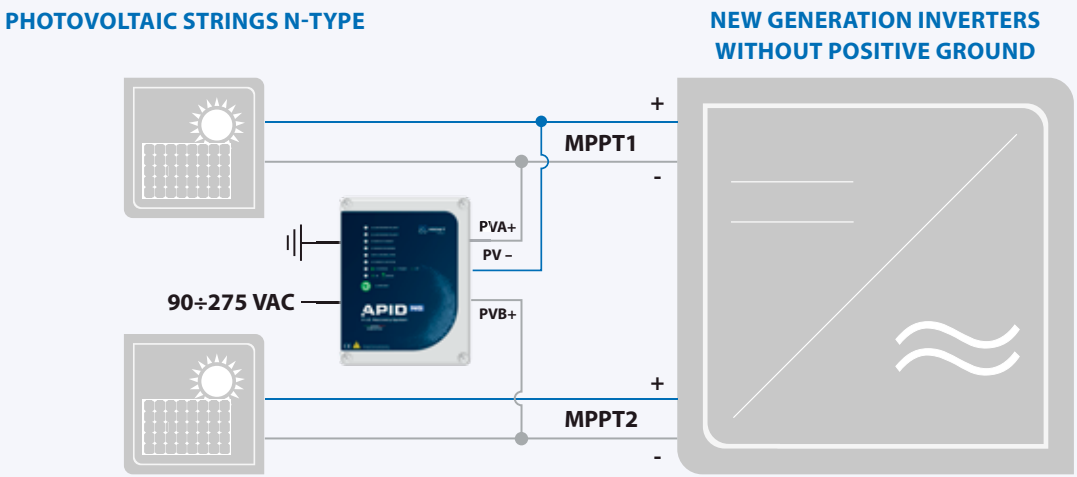
At dawn
It stay to standby
and monitors the voltages

At day
It monitors and stores voltages and insulation resistance

At night
It measures the insulation resistance and **generates a negative voltage on both poles with respect to earth, reversing the degradation process**

APID-NG

Connection of APID-NG for revamping of a plant with N-TYPE modules



Functionality and benefits

Prevention

It allows you to replace the inverter without having to change all the N-Type photovoltaic modules, preventing the occurrence of the P.I.D. phenomenon.

Profitability

Stops the economic damage caused by Potential Induced Degradation and ensures the profitability of the solar system.

Power

Stops the loss of power in the solar system.

Regeneration

Regenerates the power of solar systems by up to 100% in around 30 days.

Protection

Immediately protects new systems with P.I.D.-Free modules from a possible drop in power by up to 5%.

Resistance

Measures the insulation resistance.



	APID-NG
FOR PV MODULES WITH MODEL CELLS (needing positive pole earthing)	N-Type
MPPT OUTPUTS	2
POWER	90...275 Vac
ABSORPTION	Standby 0.5w, 2W Operation, 20W Max
INTERNAL GENERATOR	Voltage with output resistance of 165K Max. 1000 Vdc output power 2.7mA Max. at 1000v – 3.9mA Max. at 800v – 6.3mA Max. at 400V – 8mA in short circuit
AUTOMATIC MANAGEMENT OF OPERATION AND OUTPUT VOLTAGE	✓
RELAY OUTPUT WITH NC AND NA CONTACTS FOR ALARM SIGNALLING	✓
CLOCK/CALENDAR WITH 6-MONTH BACKUP	✓
ANTI-CONDENSATION VALVE	ØM12 F16 litres/hour at 0.07 bar
CONNECTIONS TO STRINGS	MC4
OPERATING TEMPERATURE	-20 °C/+50 °C
WEIGHT	950 g
CONTAINER TYPE	IP56
DIMENSIONS (L X H X D)	240 x 190 x 90 mm

	LCDAM08
Display	Backlit 16x2 LCD display with 4 keys
BUTTONS	no.4: Prog-Exit-Up-Down
HOUSING	6-module HOUSING, DIN rail or wall mounting
OPERATING TEMPERATURE	From -10 °C to +50 °C
DIMENSIONS (L X H X D)	105 x 110 x 65 mm
WEIGHT	180 g

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