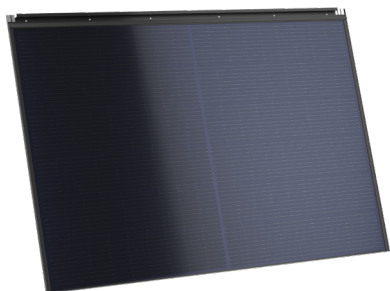


# Arres 3.1 Premium L

## The solution for more demanding needs

**ARRES**   
IN-ROOF SOLAR SYSTEM

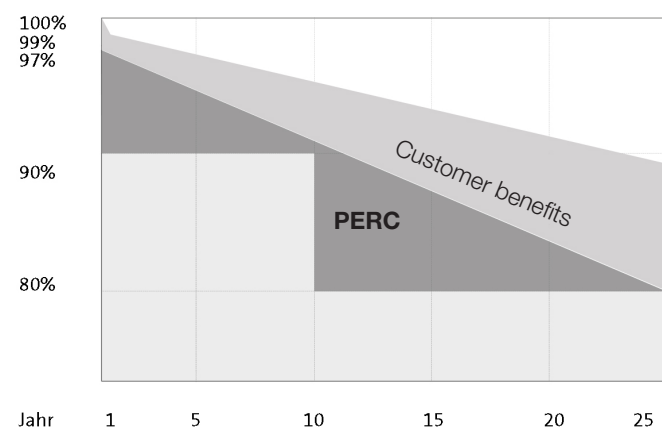
New with N-Type TOPCon Technology



**The Arres 3.1 N-Type TOPCon modules for in-roof solutions impress with their highest quality and excellent value for money. With long-term high efficiency, Arres is the perfect choice for sustainable energy generation.**

### Guaranteed high quality

The high-performance N-TYPE TOPCon solar module with half-cut technology, which is integrated within an attractive frame, comes from the German manufacturer Soluxtec. It is equipped with 4 mm-thick, toughened safety solar glass. Both the development and continuous further enhancement of Arres, as well as the assembly and quality management processes, are carried out in Switzerland. The linear performance warranty is 25 years, the product warranty 10 years.



25-year performance warranty

### Manufacture

ISO 9001: 2015: Quality management systems

ISO 14001: 2015: Environmental management systems

### Main features at a glance

Attractive design with a black frame and black rear film as well as concealed conductor tracks

Optimised glass surface with a very low coefficient of reflection

Excellent performance under poor light conditions

Optimised performance at high temperatures

Superior hail resistance rating: Class 5

Every module 100% electroluminescently tested (EL)

100% European production

### Advantages at a glance

Best value for money for a German/Swiss product

Quick installation and easy removal

Extremely sturdy

Aesthetically appealing solution

Good rear ventilation due to the low height of the module frame

Very maintenance-friendly

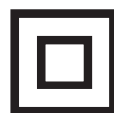
High suction and pressure load resistance



9001:2015



14001:2015



stiftung  
elektro-altgeräte-register®  
WEEE-REG.Nr. 70010859

ear

### Info

Grid dimensions and dimensioned drawings available on request or at [arres.ch](http://arres.ch)



**Performance data under standard test conditions (STC)**  
**(STC: 1000 W/m<sup>2</sup>, module temperature 25°C +/-2°C, AM 1.5 –**  
**acc. IEC 60904\_3)**

**Electrotechnical parameters**

Rated output	P <sub>max</sub> [Wp]	420	425
Short circuit current	I <sub>sc</sub> [A]	13.73	13.81
Open circuit voltage	V <sub>oc</sub> [V]	38.52	38.70
Current	I <sub>mp</sub> [A]	13.04	13.12
Voltage	V <sub>mp</sub> [V]	32.24	32.42
Module efficiency	[%]	21.42	21.67
Max. system voltage	[V]	1500	
Class range	[Wp]	– 0/+4.99	
Maximum reverse current	I <sub>r</sub> [A]	25A	
P <sub>max</sub> temperature coefficient	[%/°K]	– 0.30	
V <sub>oc</sub> temperature coefficient	[%/°K]	– 0.28	
I <sub>sc</sub> temperature coefficient	[%/°K]	+ 0.03	
Nominal operating cell temperature	(NOCT) [°C]	45 +/- 2	

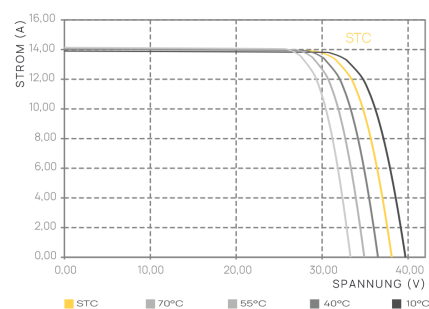
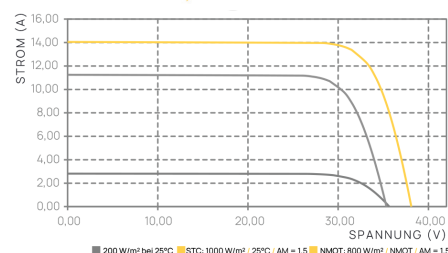
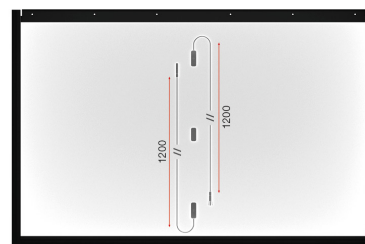
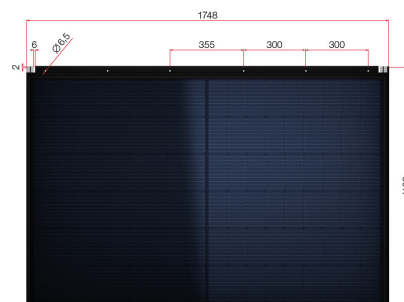
**Technical details**

Number of cells	108 Half-cut
Cell types	NTYPE TOPCON M10
Glass	4 mm thermally tempered and profiled glass
Backsheet	Long-term UV-resistant insulating film (TÜV tested)
Frame	Aluminium, black anodised
Number of diodes	3
Junction box	IP 68
Plug	Stäubli Evo2
Connection cable length	2 x 1200 mm
Weight	26.5 kg
Module dimensions (packing dimensions)	29 modules, 1854x1284x1272 mm (LxWxH)
Operating temperature range	– 40 to + 85°C

**Approvals, certificates, standards**

max. pressure	10.00 kN/m <sup>2</sup> IEC/EN61215 2nd Ed.
max. suction	3.60 kN/m <sup>2</sup> , IEC/EN61215 2nd Ed.
Hail resistance	Tested up to 50 mm diameter at 30.8 m/s Hail protection class 5, Swiss Hail Protection Register
Operational safety	Class A, protection class II, IEC/EN61730
Module warranty	10-year product warranty, 25-year linear performance warranty
Installation according to	SN EN 50583 - installation category A

**Arres 3.1 Premium Module L**



The specifications are subject to technical changes and revisions without prior notice.  
 Solarmarkt GmbH reserves the right to the definitive interpretation.

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