wattway

DATA SHEET

475 GC MODULE

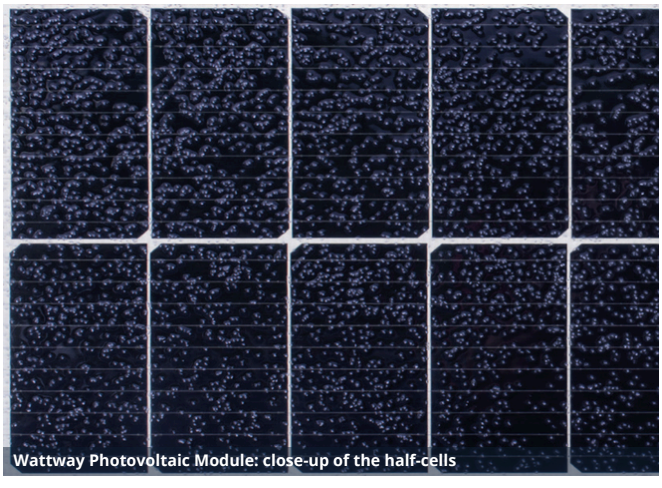
REF. V4T5

WATTWAY PLUS COMPATIBLE SOLUTION

MAKE THE MOST OF YOUR SPACE FOR POWER GENERATION

Colas has created Wattway, a trafficable photovoltaic module for pooling transport infrastructures to generate electricity while still catering for all types of vehicle transport.

The modules are very thin and resistant and are bonded/fixed directly to the existing substrate. The surface of the module is textured to give it the grip properties of a conventional road surface.



Wattway Photovoltaic Module: close-up of the half-cells

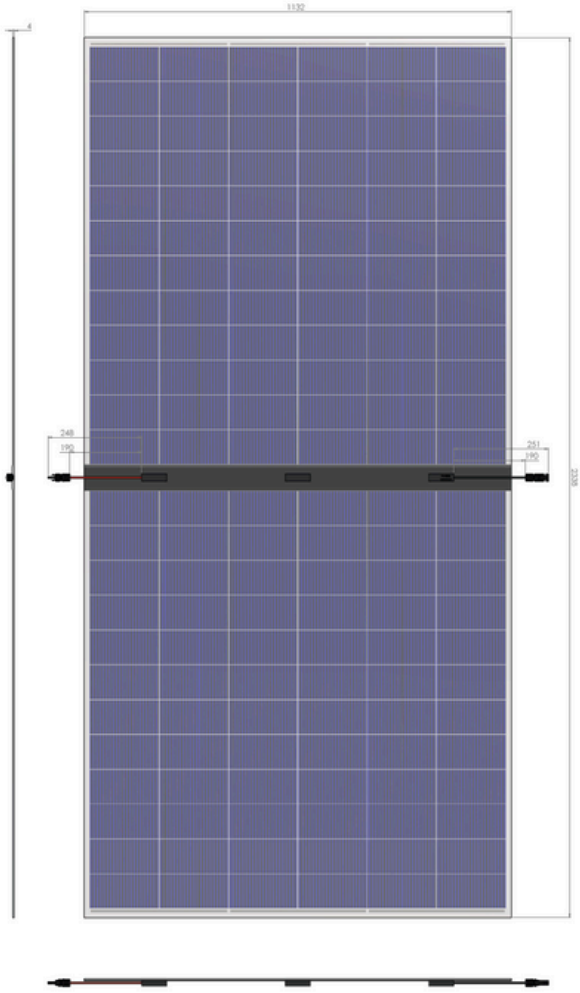
Applications: trafficable photovoltaic modules for use on transport infrastructures such as car parks, pavements, cycle paths and low-traffic roads.

A 27 KWp power plant visually integrated in a village car park (France)

BENEFITS OF WATTWAY PLUS

- A discreet architectural and landscape integration solution
- Limits environmental impact and avoids soil artificialisation
- Non-invasive, placed on top of the existing infrastructure
- Resilient technology, resistant to the vagaries of the weather, traffic-ready
- Quick: simplified administrative formalities and easy installation

DIMENSIONS



PHYSICAL CHARACTERISTICS

Dimensions (L x W)	2338 mm x 1132 mm
Power generating surface area	2.39 m²
Thickness	4.4 mm
Weight	17 kg
Number of cells	144 1/2 M10 cells
Type of cells	Monocrystalline P-type PERC
Connectors	MC4
Cable length	190 mm
Junction box	3 bypass diodes
Frame	No
Backsheet colour	Transparent
Type of mounting	Bonded to asphalt or concrete
Electrical safety	Classe II - IP68
Traffic resistance[1]	1 million wheel passes 13T
Load[2] and impact resistance	IK 7 / IK10 Hail test: 2 Joules Indentation at 20°: 700 Newton
Adhesion	SRT > 50 PMT > 0.6 in accordance with the 2015-19 Directorate-General for Infrastructure, Transport and Mobility (DGTIM) / DIT circular

EFFICIENCY AND TEMPERATURES

Cell efficiency	20%
Temperature (°C)	-40° / +85°
Coeff. Temp. Power (Pmpp)	-0.38% / °C
Coeff. Temp. Voltage (Voc)	-0.36% / °C
Coeff. Temp. Current (µIcc)	+0.07% / °C
NMOT	-

[1] This module uses encapsulation identical to the Wattway module certified in mid-2024, the only photovoltaic road module to have obtained IEC certification.
[2] IK7 for the cells / IK10 for the active parts of the panel.
[3] The maximum system voltage depends on the conditions of use (traffic, public access, etc.) and must be specified by the customer.

PHOTOVOLTAIC CHARACTERISTICS

Rated power	476 Wc
Output power tolerance	+/-5 W
Voltage at rated power (Vmpp)	43.7 V
Current at rated power (Impp)	10.9 A
Open circuit voltage Voc (V)	49.0 V
Short-circuit current (Icc)	11.5 A
Maximum system voltage[3]	1000 V / 120 V
Maximum reverse current	30 A

IEC 61215
IEC 61730