

## ADCON Solar Panels

Adcon's solar panels are built in Austria, using solar cells made in Germany by Bosch. The panels' shingle technology utilises overlapping elements to eliminate unused space. The mono- and polycrystalline cells offer high efficiency (14 resp. 19%) without losses due to burn-in and ageing.

The solar panels are protected by a stainless steel frame, fixed to an aluminium base plate with integrated mast mounting bracket. The extremely small footprint of the panels reduces wind pressure, makes them more difficult to detect and less subject to vandalism. A 5-pin Binder cable connects the solar panels to our RTUs.

### Models

- 220mA: this postcard sized cell was developed for our 10mW range of RTUs, namely the A723 and A724 series. In very sunny areas it can also be used to power the larger A75x RTUs (dependent on the power consumption of sensors and transmission intervals). See image top right.
- 540mA: the larger cell is ideally matched to charge the 3.3Ah batteries of the A73x, A75x and RA440 RTUs. See image bottom right.



### Technical data

Solar Panel 220mA	Item #: 200.723.520	Solar Panel 540mA	Item #: 200.733.522
Wafer	Bosch Cell P Class 3.46	Wafer	Bosch Cell M2BB Class 4.04
Type and # of cells	embedded polycrystalline; 18	Type and # of cells	embedded monocrystalline; 18
Efficiency rating	13.8%	Efficiency rating	19%
Current I <sub>sc</sub> / I <sub>mpp</sub>	235mA / 220mA	Current I <sub>sc</sub> / I <sub>mpp</sub>	578mA / 543mA
Voltage U <sub>oc</sub> / U <sub>mpp</sub>	>=10.6VDC / >=8.8VDC	Voltage U <sub>oc</sub> / U <sub>mpp</sub>	>=11.2VDC / >=9.4VDC
Power (P <sub>peak</sub> )	2W ± 3%	Power (P <sub>peak</sub> )	5.11W ± 3%
Dimensions	125 x 147 x 62mm (L x W x D)	Dimensions	213 x 164 x 62mm (L x W x D)
Weight	246 g	Weight	376 g
Cable	50cm, shielded, PUR	Cable	50cm, shielded, PUR
Connector	M9 5-pin, Binder Germany	Connector	M9 5-pin, Binder Germany
Protection class	IP-66	Protection class	IP-66
Surface protection	scratch resistant polycarbonate	Surface protection	scratch resistant polycarbonate
Mounting	mast mounting bracket, incl. pipe clamps for poles from 35-45mm ø	Mounting	mast mounting bracket, incl. pipe clamps for poles from 35-45mm ø