

# Energy collector smart



## IS-2 Power Pro smart collector

### Application:

- ▶ High performance solar plant
- ▶ Simultaneously electrical + thermal energy production
- ▶ On-roof and flat-roof installation
- ▶ Single-family home, apartment buildings, industrial plants and hotel
- ▶ New construction and refurbishment

- ▶ Efficient energy collector consisting of photovoltaic and thermal solar system
- ▶ Efficient installation of large collector arrays and large plants
- ▶ Double generation, electricity and heat in one collector
- ▶ Optimal module cooling, higher power output
- ▶ Can be combined with any energy systems
- ▶ Half installation effort, cheap installation
- ▶ Optimized stagnation behavior
- ▶ Electricity yield 300 Wp
- ▶ Collector size 1,69 m<sup>2</sup>
- ▶ Outstanding design
- ▶ Heat yield 855 W

**Good  
efficiency**

**ELECTRIC  
+  
THERMAL**

|                                          | <b>IS-2 Power Pro smart collector</b>                                 |
|------------------------------------------|-----------------------------------------------------------------------|
| <b>General data</b>                      |                                                                       |
| Dimensions                               | 1677 x 1006 x 60 mm                                                   |
| Weight                                   | 37 kg                                                                 |
| PV cells                                 | 60 mono-crystalline cells, 156x156 mm                                 |
| Operating temperatures                   | - 25 to + 95 °C                                                       |
| Sealing                                  | EPDM & silicone                                                       |
| Insulation                               | Glass wool                                                            |
| Connecting cable                         | 2 x 950 mm connecting cable                                           |
| Module glass                             | 4mm low-iron safety glass                                             |
| Dimensions rising / collecting line      | 8/18mm                                                                |
| Absorber material                        | pure copper absorber                                                  |
| Absorber structure                       | ultrasonically welded absorber, soldered pipe harp                    |
| Rear wall insulation                     | Aluminium laminated sheet                                             |
| Collector housing                        | Powder coated aluminium                                               |
| Colour                                   | Black, RAL 9005                                                       |
| Connections                              | 4x CU 18 mm, 4 -side connections, supply and return freely selectable |
| <b>Technical data</b>                    |                                                                       |
| Performance                              | 855 W                                                                 |
| Gross area                               | 1,69 m <sup>2</sup>                                                   |
| Nominal flow                             | 100 - 200 l/h                                                         |
| Max. operation pressure                  | 8 bar                                                                 |
| Stagnation temperature                   | 15 bar                                                                |
| Filling quantity / collector             | 0,85 l                                                                |
| Max. installation angle                  | 90°                                                                   |
| Min. installation angle                  | 15°                                                                   |
| Assembly                                 | Vertical, horizontal, on-roof, free-standing                          |
| <b>Electrical data*</b>                  |                                                                       |
| Nominal power [P <sub>max</sub> ]        | 300 Wp                                                                |
| Nominal voltage [V <sub>mpp</sub> ]      | 37,77 V                                                               |
| Short-circuit current [I <sub>SC</sub> ] | 9,78 A                                                                |
| Open circuit voltage [VOC]               | 39,86 V                                                               |
| Nominal current [I <sub>mpp</sub> ]      | 9,15 A                                                                |
| Max. system voltage                      | UL : 600V / IEC : 1000V                                               |
| Power tolerance                          | Positive tolerance 0+5Wp                                              |
| Performance guarantee                    | 90% <10 years, 80% 20 years                                           |
| Product warranty                         | 10 years                                                              |
| <b>Product no.</b>                       | 1500 0199                                                             |



BES BuildingEnergySolutions GmbH  
 Robert-Koch-Str. 50 Tel.: +49 (0) 6131 25 06 17-0 E-Mail: info@bes-eu.com  
 D-55129 Mainz Fax: +49 (0) 6131 25 06 17-9 www.bes-eu.com