E-AblePower Technology

LISHUI E-ABLE POWER EQUIPMENT CO., LTD
No.368 Chengbei Road, Liandu District, Lishui, Zhejiang, China
www.e-ablepower.com | sales@e-ablepower.com | WhatsApp +86 153 5558 9600

SOLARWRAP GEOFLEX / 18 V SERIES

GeoFlex 18 V foldable vertical modules

6, 8, 10 and 12-sided foldable PV · 100–300 W · pole 120–330 mm · folds to under 24% of its wrapped diameter



Folded module, transport condition

GeoFlex is a folding polygonal tube: the same glass and cells as SolarWrap, but the panel ships flat and closes round the pole on site. Freight volume drops by more than half compared with a rigid cylinder, which is what makes long-haul projects and small spare-part stocks work.

Family	Sides	Folded / wrapped Ø (mm)	Pmax range
HEXAGON	6	196 / 225	100 – 150 W
OCTAGON	8	270 / 290	135 – 200 W
DECAGON	10	340 / 360	165 – 250 W
DODECAGON	12	410 / 430	200 – 300 W

FULL RANGE — 18 V NOMINAL

Family	Model	Dimension	Folded (mm)	Pmax	Vmp	Imp	Voc	Isc	Max pole Ø
HEXAGON	HEXA-11018	L1160 × Ø225	196	100	18	5.50	21.6	6.10	120
HEXAGON	HEXA-15018	L1560 × Ø225	196	150	18	8.33	21.6	9.16	120
OCTAGON	OCTA-13518	L1160 × Ø290	270	135	18	7.50	21.6	8.20	190
OCTAGON	OCTA-20018	L1560 × Ø290	270	200	18	11.11	21.6	12.20	190
DECAGON	DECA-16518	L1160 × Ø360	340	165	18	9.10	21.60	10.10	260
DECAGON	DECA-25018	L1560 × Ø360	340	250	18	13.90	21.60	15.20	260
DODECAGON	DODE-20018	L1160 × Ø430	410	200	18	11.10	21.60	12.20	330
DODECAGON	DODE-30018	L1560 × Ø430	410	300	18	16.70	21.60	18.30	330

Common to all: monocrystalline cells made in Taiwan, 23.20% module efficiency, ±3% power tolerance, 2.5 mm² cable with MC4, front 5400 Pa / back 2400 Pa, IP66, −20 to +70 °C, 3-year warranty.

Before you quote. The factory names the 100 W hexagonal model HEXA-11018 on the specification page but HEXA-10018 in the yield table, and the 300 W dodecagon appears as both DODE-30018 and DEDE-30018. We quote the specification-page code; confirm the code on the PO with the factory.

PICK THE FAMILY FROM THE POLE

Pole diameter at clamp height	Family	Models	Wrapped Ø
up to 120 mm	HEXAGON	HEXA-11018 · HEXA-15018	Ø225 mm
121 – 190 mm	OCTAGON	OCTA-13518 · OCTA-20018	Ø290 mm
191 – 260 mm	DECAGON	DECA-16518 · DECA-25018	Ø360 mm
261 – 330 mm	DODECAGON	DODE-20018 · DODE-30018	Ø430 mm

WHAT THE FOLDING BUYS YOU

Freight. A rigid 1.56 m cylinder is mostly air in the container; folded panels stack flat and cut the shipped volume by more than half.

Last-mile handling. One person carries a folded 300 W panel up a pole; the rigid equivalent needs two and a cradle.

Spares. A utility can hold a year of spares in a shelf instead of renting a yard for rigid tubes.

Site fit. The same panel closes on 120 to 330 mm poles by choosing the family and the corner buckles supplied.

REFERENCE YIELD

Daily output by sunshine hours

Model	2.5	3	3.5	4	4.5	5	5.5	6
HEXA-11018	150	180	210	240	270	300	330	360
HEXA-15018	200	240	280	320	360	400	440	480
OCTA-13518	175	210	345	280	315	350	385	420
OCTA-20018	275	330	385	440	495	550	605	660
DECA-16518	200	240	280	320	360	400	440	480
DECA-25018	200	240	280	320	360	400	440	480
DODE-20018	275	330	385	440	495	550	605	660
DODE-30018	400	480	560	640	720	800	880	960

Average daily generation, Wh, at 23°N. Peak-generation column of the factory table runs about 15–25% higher.

READING THE TABLE

Match to the local worst month. Size on December, not on the annual average — the pack has to survive the short days.

Two modules in series double the voltage. Output in Wh does not double unless both faces see the same sun — mount them on the same exposure.

DECA columns are identical. 165 W and 250 W show the same Wh at both lengths — treat the 250 W row as unconfirmed and ask for a re-issue.

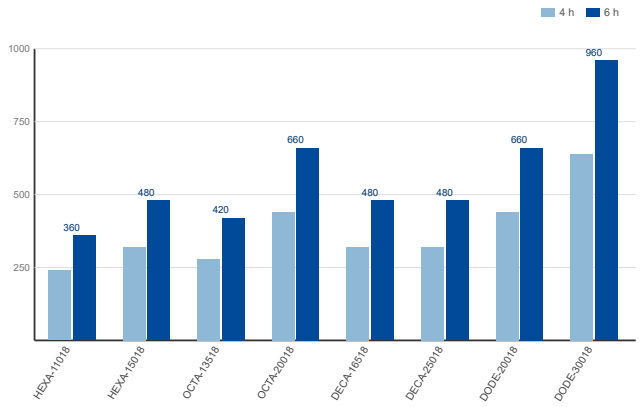
Latitude correction. The table is 23°N. Above 35° expect 15–25% less in winter; ask us to re-run it for the site.

Ignore the 3.5 h spike at OCTA-13518. The factory table prints 345 Wh where the sequence implies 245 Wh; we quote 245 Wh until the factory corrects it.

Free-standing numbers. These are module outputs only. Controller losses (about 3%) and LED duty cycle are on top.

WORKED EXAMPLE — 6 M RESIDENTIAL STREET

Load	50 W × 11 h = **550 Wh/day**
With 25% allowance	**688 Wh** to be generated
Array at 4 h sun	688 / 4 = **172 W** → 2 × HEXA-11018 = 200 Wp
Pack for 3 nights	550 × 3 = **1,650 Wh** = 129 Ah @ 12.8 V
Offered battery	2 × K1290 = 180 Ah / 2,304 Wh
Wiring	Two modules in parallel (18 V system), one 30 A MPPT



Daily Wh at 4 h (light) and 6 h (dark) sunshine per model

FROM 18 V MODULES TO A SYSTEM VOLTAGE

Battery system	Modules in series	Array Voc	Controller window	Note
12 V	1	21.6 V	12 V MPPT, ≥ 20 V input	Most street-light controllers accept this directly
24 V	2	43.2 V	24 V MPPT, ≥ 45 V input	Standard for 60–120 W heads
36 V	2	43.2 V	36 V MPPT	Use the 36 V module variants where cable runs are long
48 V	3	64.8 V	48 V MPPT, ≥ 70 V input	Check the controller maximum before ordering

Voc rises in cold weather; leave at least 10% headroom against the controller maximum input.

Notes. 18 V modules are the standard for 12 V and 24 V battery systems; the 36 V versions (HEXA-15036, OCTA-20036, OCTA-25036, DODE-30036) have their own sheet. Do not connect the MC4 pair of the last module in a string.