# JA Solar DeepBlue 4.0 Pro JAM54D40-465/LB 465 W · Black frame

JA Solar · Zonnepanelen · SKU JAM54D40-465-LB

TOPCon module 465 W, bifacial, black frame (Black frame). Pallet: 36 pcs, 40'HC container: 936 pcs.

| Parameter | Value |
|---|---|
| Power | 465 W |
| Technology | TOPCon |
| Frame colour | black |
| Efficiency | 23.3 % |
| Dimensions | 1762×1134×30 mm |
| Cells | 108 half-cells (6x18) - 54-cell format |
| Bifacial | yes |
| Voc | 40.2 V |
| Isc | 14.65 A |
| Weight | 22 kg |
| Dimensions (m) | 1.762 × 1.134 × 0.03 |
| Units per pallet | 36 |
| Pallets per 40'HC | 26 |

## Warranty

25-year product warranty, 30-year linear performance warranty — per the manufacturer datasheet.

Based on JA Solar manufacturer documentation. Full certificates: https://www.jasolar.com