Founded in 1997, Trina Solar is the world’s leading total solution provider for solar energy. With local presence around the globe, Trina Solar is able to provide exceptional service to each customer in each market and deliver our innovative, reliable products with the backing of Trina as a strong, bankable brand. Trina Solar now distributes its PV products to over 100 countries all over the world. We are committed to building strategic, mutually beneficial collaborations with installers, developers, distributors and other partners in driving smart energy together.

**Comprehensive Products and System Certificates**
- IEC61215/IEC61730/IEC61701/IEC62716
- ISO 9001: Quality Management System
- ISO 14001: Environmental Management System
- ISO45001: Occupational Health and Safety Management System
- ISO14064: Greenhouse Gases Emissions Verification
- ISO45001: Occupational Health and Safety Management System

**PERFORMANCE WARRANTY**
- Guaranteed Power: 90% - 100% for 5 years (98.0% for 10 years, 84.8% for 25 years)
- Trina standard

**High power**
- Up to 455W front power and 20.8% module efficiency with half-cut and MBB (Multi Busbar) technology bringing more BOS savings
- Lower resistance of half-cut and good reflection effect of MBB ensure high power

**High reliability**
- Ensured PID resistance through cell process and module material control
- Resistant to salt, acid and ammonia
- Mechanical performance: Up to 5400 Pa positive load and 2400 Pa negative load

**High energy generation**
- Excellent IAM and low light performance validated by 3rd party with cell process and module material optimization
- Lower temp coefficient (-0.36%) and NMOT bring more energy leading to lower LCOE
- Better anti-shading performance and lower operating temperature
### I-V CURVES OF PV MODULE (445W)

- Voltage (V)
- Current (A)

### P-V CURVES OF PV MODULE (445W)

- Voltage (V)
- Power (W)

*Measuring tolerance: ±3%.

41 ¥ (±3 ¥) - 0.36% ¥ - 0.26% ¥ 0.04% ¥

NMOT (Nominal Module Operating Temperature)

- Operational Temperature: -40°C to +85°C
- Max System Voltage: 1500V DC (IEC)

12 year Product Workmanship Warranty
25 year Power Warranty
2% first year degradation
0.55% Annual Power Attenuation

(Please refer to product warranty for details)