

# Three Phase String Inverter

SUN-3/5/6/8/10/12K-G05-AU



2 MPP trackers, Max. efficiency up to 98.3%



Zero export application, VSG application



String intelligent monitoring (optional)



Wide output voltage range



Anti-PID function (Optional)

**Deye**

Stock Code: 605117.SH

| Model                                     | SUN-3K<br>-G05-AU                                      | SUN-5K<br>-G05-AU | SUN-6K<br>-G05-AU | SUN-8K<br>-G05-AU | SUN-10K<br>-G05-AU | SUN-12K<br>-G05-AU |
|-------------------------------------------|--------------------------------------------------------|-------------------|-------------------|-------------------|--------------------|--------------------|
| Input Side                                |                                                        |                   |                   |                   |                    |                    |
| Max. PV Input Power (kW)                  | 4.5                                                    | 7.5               | 9                 | 12                | 15                 | 18                 |
| Max. PV Input Voltage (V)                 | 1000                                                   |                   |                   |                   |                    |                    |
| Start-up PVInput Voltage (V)              | 140                                                    |                   |                   |                   |                    | 250                |
| MPPT Operating Range (V)                  | 120-850                                                |                   |                   |                   |                    | 200~850            |
| Max. PV Input Current (A)                 | 13+13                                                  |                   |                   |                   |                    |                    |
| Max. Short Circuit Current (A)            | 19.5+19.5                                              |                   |                   |                   |                    |                    |
| Number of MPPT / Strings per MPPT         | 2/1                                                    |                   |                   |                   |                    |                    |
| Output Side                               |                                                        |                   |                   |                   |                    |                    |
| Rated Output Power (kW)                   | 3                                                      | 5                 | 6                 | 8                 | 10                 | 12                 |
| Max. Active Power (kW)                    | 3                                                      | 5                 | 6                 | 8                 | 10                 | 12                 |
| Nominal Output Voltage / Range (V)        | 3L/N/PE 400V/340V-440V                                 |                   |                   |                   |                    |                    |
| Rated Grid Frequency (Hz)                 | 50 / 60 (Optional)                                     |                   |                   |                   |                    |                    |
| Operating Phase                           | Three phase                                            |                   |                   |                   |                    |                    |
| Rated AC Grid Output Current (A)          | 4.3                                                    | 7.2               | 8.7               | 11.6              | 14.5               | 17.4               |
| Max. AC Output Current (A)                | 4.3                                                    | 7.2               | 8.7               | 11.6              | 14.5               | 17.4               |
| Output Power Factor                       | 0.8 leading to 0.8 lagging                             |                   |                   |                   |                    |                    |
| Total Harmonics Current Distortion (THDi) | <3%                                                    |                   |                   |                   |                    |                    |
| DC Injection Current (mA)                 | <0.5%                                                  |                   |                   |                   |                    |                    |
| Grid Frequency Range                      | 45-55 or 55-65 (Optional)                              |                   |                   |                   |                    |                    |
| Efficiency                                |                                                        |                   |                   |                   |                    |                    |
| Max. Efficiency                           | 98.1%                                                  | 98.2%             |                   | 98.3%             |                    |                    |
| Euro Efficiency                           | 97.5%                                                  | 97.6%             |                   | 97.8%             |                    |                    |
| MPPT Efficiency                           | >99%                                                   |                   |                   |                   |                    |                    |
| Protection                                |                                                        |                   |                   |                   |                    |                    |
| DC Reverse-Polarity Protection            | Yes                                                    |                   |                   |                   |                    |                    |
| AC Short Circuit Protection               | Yes                                                    |                   |                   |                   |                    |                    |
| AC Output Overcurrent Protection          | Yes                                                    |                   |                   |                   |                    |                    |
| Output Overvoltage Protection             | Yes                                                    |                   |                   |                   |                    |                    |
| Insulation Resistance Protection          | Yes                                                    |                   |                   |                   |                    |                    |
| Ground Fault Monitoring                   | Yes                                                    |                   |                   |                   |                    |                    |
| Anti-islanding Protection                 | Yes                                                    |                   |                   |                   |                    |                    |
| Temperature Protection                    | Yes                                                    |                   |                   |                   |                    |                    |
| Integrated DC Switch                      | Yes                                                    |                   |                   |                   |                    |                    |
| Remote software upload                    | Yes                                                    |                   |                   |                   |                    |                    |
| Remote change of operating parameters     | Yes                                                    |                   |                   |                   |                    |                    |
| Surge protection                          | DC Type II / AC Type II                                |                   |                   |                   |                    |                    |
| General Data                              |                                                        |                   |                   |                   |                    |                    |
| Size (mm)                                 | 332W×457H×203D (Excluding connectors and brackets)     |                   |                   |                   |                    |                    |
| Weight (kg)                               | 11                                                     |                   |                   |                   |                    |                    |
| Topology                                  | Transformerless                                        |                   |                   |                   |                    |                    |
| Internal Consumption                      | <1W (Night)                                            |                   |                   |                   |                    |                    |
| Running Temperature                       | -25 to +65℃                                            |                   |                   |                   |                    |                    |
| Ingress Protection                        | IP65                                                   |                   |                   |                   |                    |                    |
| Noise Emission (Typical)                  | ≤ 30 dB                                                |                   |                   |                   |                    |                    |
| Cooling Concept                           | Natural cooling                                        |                   |                   |                   |                    |                    |
| Max. Operating Altitude Without Derating  | 4000m                                                  |                   |                   |                   |                    |                    |
| Warranty                                  | 10 Years                                               |                   |                   |                   |                    |                    |
| Grid Connection Standard                  | AS/NZS 4777.2                                          |                   |                   |                   |                    |                    |
| Operating Surroundings Humidity           | 0-100%                                                 |                   |                   |                   |                    |                    |
| Safety EMC / Standard                     | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2 |                   |                   |                   |                    |                    |
| Features                                  |                                                        |                   |                   |                   |                    |                    |
| DC Connection                             | VP-D4B                                                 |                   |                   |                   |                    |                    |
| AC Connection                             | IP65 rated plug                                        |                   |                   |                   |                    |                    |
| Display                                   | LCD1602                                                |                   |                   |                   |                    |                    |
| Interface                                 | RS485/RS232/Wifi/LAN                                   |                   |                   |                   |                    |                    |