



# INVERTER IBRIDO

**L'Inverter Intelligente 3~8kW senza compromessi.**

Display OLED, WiFi e Bluetooth, <10 ms UPS switch time.

**STH Serie**

# LANP<sup>TM</sup>

POWERING EVERY DAY



| Modello/Model | INVERTER IBRIDO | STH-3KTL-LSS | STH-4KTL-LS | STH-5KTL-LS | STH-6KTL-LS | STH-8KTL-LS |
|---------------|-----------------|--------------|-------------|-------------|-------------|-------------|
|---------------|-----------------|--------------|-------------|-------------|-------------|-------------|

## PV Input

|                                |        |        |        |        |        |
|--------------------------------|--------|--------|--------|--------|--------|
| Start-up Voltage (V)           | 58     | 58     | 58     | 58     | 58     |
| Max. DC Input Voltage (V)      | 600    | 600    | 600    | 600    | 600    |
| Rated DC Input Voltage (V)     | 360    | 360    | 360    | 360    | 360    |
| MPPT Voltage Range (V)         | 80-550 | 80-550 | 80-550 | 80-550 | 80-550 |
| No. of MPP Trackers            | 1      | 2      | 2      | 2      | 2      |
| No. of DC Inputs per MPPT      | 1      | 1/1    | 1/1    | 1/1    | 1/1    |
| Max. Input Current (A)         | 20     | 20/20  | 20/20  | 20/20  | 20/20  |
| Max. Short-circuit Current (A) | 25     | 25/25  | 25/25  | 25/25  | 25/25  |

## Battery

|                                   |                                      |         |         |         |         |
|-----------------------------------|--------------------------------------|---------|---------|---------|---------|
| Battery Type                      | Lithium battery (with BMS)/Lead Acid |         |         |         |         |
| Battery Communication Mode        | CAN                                  |         |         |         |         |
| Battery Voltage Range (V)         | 40-60                                | 40-60   | 40-60   | 40-60   | 40-60   |
| Max. Charge/Discharge Current (A) | 80/80                                | 100/100 | 120/120 | 120/120 | 160/160 |

## Output (Grid)

|                                        |                            |       |       |       |       |
|----------------------------------------|----------------------------|-------|-------|-------|-------|
| Rated Output Power (W)**               | 3,000                      | 4,000 | 5,000 | 6,000 | 8,000 |
| Max. Output Power (W)                  | 3,300                      | 4,400 | 5,500 | 6,600 | 8,800 |
| AC Output Rated Apparent Power (VA)    | 3,000                      | 4,000 | 5,000 | 6,000 | 8,000 |
| Max. Apparent Power (VA)               | 3,300                      | 4,400 | 5,500 | 6,600 | 8,800 |
| Rated Output Voltage (V)**             | L/N/PE, 220/230            |       |       |       |       |
| Rated AC Frequency (Hz)                | 50/60                      |       |       |       |       |
| AC Output Rated Current (A)            | 13                         | 17.4  | 21.7  | 26.1  | 34.8  |
| Max. Output Current (A)                | 15                         | 20    | 25    | 30    | 40    |
| The measured Inrush current (A)        | 8.8A@28μs                  |       |       |       |       |
| Max. Output Fault Current (A)          | 50                         | 50    | 80    | 80    | 80    |
| Max. Output Overcurrent Protection (A) | 50                         | 50    | 80    | 80    | 80    |
| Power Factor                           | 0.8 leading ...0.8 lagging |       |       |       |       |
| Max. Total Harmonic Distortion         | <3% @Rated Output Power    |       |       |       |       |
| DCI                                    | <0.5%In                    |       |       |       |       |

## Output (Back-up)

|                                          |                          |                          |                           |                           |                           |
|------------------------------------------|--------------------------|--------------------------|---------------------------|---------------------------|---------------------------|
| Rated Output Power (W)                   | 3,000                    | 4,000                    | 5,000                     | 6,000                     | 8,000                     |
| Max. Output Power (W)                    | 3,300                    | 4,400                    | 5,500                     | 6,600                     | 8,800                     |
| Back-up Output Rated Apparent Power (VA) | 3,000                    | 4,000                    | 5,000                     | 6,000                     | 8,000                     |
| Max. Apparent Power (VA)                 | 3,300                    | 4,400                    | 5,500                     | 6,600                     | 8,800                     |
| Back-up Output Rated Current (A)         | 13                       | 17.4                     | 21.7                      | 26.1                      | 34.8                      |
| Max. Output Current (A)                  | 15                       | 20                       | 25                        | 30                        | 40                        |
| UPS Switching Time                       | <10ms                    |                          |                           |                           |                           |
| Rated Output Voltage (V)                 | L/N/PE, 220/230          |                          |                           |                           |                           |
| Rated AC Frequency (Hz)                  | 50/60                    |                          |                           |                           |                           |
| Peak Output Apparent Power (VA)          | 6,000 <sup>①</sup> , 10s | 8,000 <sup>①</sup> , 10s | 10,000 <sup>①</sup> , 10s | 12,000 <sup>①</sup> , 10s | 12,000 <sup>①</sup> , 10s |
| Load Capacity of Motors                  | /                        | /                        | 4HP                       | 4HP                       | 4HP                       |

## Efficiency

|                     |       |       |       |       |       |
|---------------------|-------|-------|-------|-------|-------|
| Max. Efficiency     | 97.6% | 97.6% | 97.6% | 97.6% | 97.6% |
| European Efficiency | 97.0% | 97.0% | 97.0% | 97.0% | 97.0% |
| MPPT Efficiency     | 99.9% | 99.9% | 99.9% | 99.9% | 99.9% |

## Protection

|                                  |            |
|----------------------------------|------------|
| DC Reverse Polarity Protection   | Integrated |
| Insulation Resistance Protection | Integrated |
| DC Switch                        | Integrated |
| AFCI                             | Optional   |
| Surge Protection                 | Integrated |
| Over-temperature Protection      | Integrated |
| Residual Current Protection      | Integrated |
| Islanding Protection             | Integrated |
| AC Over-voltage Protection       | Integrated |
| Overload Protection              | Integrated |
| AC Short-circuit Protection      | Integrated |

## General Data

|                                  |                          |
|----------------------------------|--------------------------|
| Over Voltage Category            | DC : ; AC :              |
| Dimensions (mm)                  | 488*374*205              |
| Weight (KG)                      | 20 / 21                  |
| Protection Degree                | IP66                     |
| Self-consumption at Night (W)    | < 15                     |
| Topology                         | Transformerless          |
| Operating Temperature Range (°C) | -25~60                   |
| Relative Humidity (%)            | 0~100                    |
| Operating Altitude (m)           | 3000                     |
| Cooling                          | Natural Convection / Fan |
| Noise Level (dB)                 | <40 / <50                |
| Display                          | LCD/ OLED                |
| Communication                    | WiFi/Bluetooth           |

La potenza di uscita supererà il valore nominale solo quando la potenza nell'array fotovoltaico è sufficiente e la durata del sovraccarico è correlata alla potenza di sovraccarico.

\*Per l'impostazione G98, la potenza di uscita massima, la potenza nominale e la potenza apparente massima (in W e VA) sono pari o non superiori a (3600 W) o 15,6 A.

\*\*A causa delle differenze nei valori di tensione nei vari paesi, possono verificarsi lievi variazioni. I diritti di interpretazione finale appartengono al produttore.