

**WECO**

# TH SERIES

8 – 10 – 12 – 15 – 18 – 20kW

**MODEL  
YEAR  
2026**

THREE PHASE INVERTER



Power  
Reflected.

## FEATURES

New glass front design  
50A Charging / Discharging  
Up to 200% PV Overdesign

### **Transparent Design, Visible innovation.**

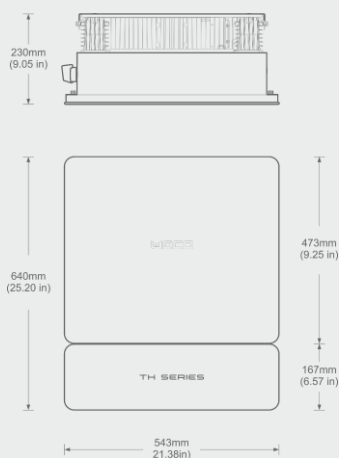
The TH Series combines a groundbreaking glass design with compact, user-friendly engineering. Easy to install and powerful for any project from 8 to 20kW.

# TH SERIES

## THREE PHASE HYBRID INVERTER

### Specifications

| Specifications               |  | 8kW  | 10 kW  | 12 kW    | 15 kW    | 18kW    | 20 kW    |
|------------------------------|--|--|--------|----------|----------|---------|----------|
| PV INPUT                     | Max. Power of PV Array                           | 16 kW  | 20 kW  | 24 kW    | 24 kW    | 30kW    | 30 kW    |
|                              | Max. Input Voltage                               | 1000 V   |        |          |          |         |          |
|                              | MPPT Voltage Range                               | 140 V ~ 850 V                                    |        |          |          |         |          |
|                              | Start Up Voltage                                 | 160V   |        |          |          |         |          |
|                              | No. of Independent MPPT Trackers                 | 2  |        |          |          |         |          |
|                              | No. of Independent MPPT Strings per MPPT Input   | 1  | 2      |          |          |         |          |
|                              | Max. Input Current per MPPT Tracker              | 20A  |        |          |          | 25A     |          |
|                              | Max. Short-circuit Current per MPPT Tracker      | 30A  |        |          |          |         |          |
| BATTERY                      | Battery Type                                     | WECO LFP   |        |          |          |         |          |
|                              | Battery Voltage Range                            | 135 V ~ 750 V                                    |        |          |          |         |          |
|                              | Max. Charging Current / Max. Discharging Current | 50 A   |        |          |          |         |          |
|                              | Rated Charging / Discharging Current             | 50 A   |        |          |          |         |          |
| AC INPUT/OUTPUT<br>(On-Grid) | Normal AC Voltage                                | 3W+N+PE, 220 / 380 V ; 230 / 400V ; 240 / 415 V  |        |          |          |         |          |
|                              | AC Voltage Range                                 | 360 V ~ 440 V                                    |        |          |          |         |          |
|                              | Rated AC Grid Frequency                          | 50 Hz / 60 Hz                                    |        |          |          |         |          |
|                              | Power Factor                                     | 1 (-0.8 to +0.8 adjustable)                      |        |          |          |         |          |
|                              | Rated Active Power (Input/Output)                | 8 kW   | 10 kW  | 12 kW    | 15 kW    | 18kW    | 20 kW    |
|                              | Rated Apparent Output Power                      | 8.8 kVA  | 11 kVA | 13.2 kVA | 16.5 kVA | 19.8kW  | 22.2 kVA |
|                              | Rated Grid Output Current (@400 V)               | 11.6 A   | 14.5 A | 17.4 A   | 21.8 A   | 26A     | 28 A     |
|                              | Harmonics THDI (@Nominal power)                  | <2%  |        |          |          |         |          |
|                              | Max. Input Apparent Power                        | 16kVA  | 20 kVA | 24 kVA   | 27.6kVA  | 34.5kVA | 34.5kVA  |
| Grid Bypass                  | 23.2A  | 29 A   | 34.8 A | 40 A     | 50A      | 50A     |          |
| BACKUP OUTPUT                | Nominal Output Voltage                           | 3W+N+PE, 220 / 380 V ; 230 / 400 V ; 240 / 415 V |        |          |          |         |          |
|                              | Rated Output Frequency                           | 50 Hz / 60 Hz                                    |        |          |          |         |          |
|                              | Rated Active Power                               | 8 kW   | 10 kW  | 12 kW    | 15 kW    | 28kW    | 20 kW    |
|                              | Max. Apparent Output Power (10s, 150%)           | 12 kVA   | 15 kVA | 18 kVA   | 22.5 kVA | 27kVA   | 30 kVA   |
|                              | Max. Switch Time                                 | ≤ 20 mS  |        |          |          |         |          |
|                              | Output THDI (@Linear load)                       | < 2%   |        |          |          |         |          |
| EFFICIENCY                   | MPPT Efficiency                                  | 99.9%  |        |          |          |         |          |
|                              | Max. Efficiency                                  | 98.40 %  |        |          |          |         |          |
|                              | Euro Efficiency                                  | 97.50 %  |        |          |          |         |          |



# TH SERIES

## INVERTERS

WECO

| Specifications      |   | 8 KW                                    | 10 KW | 12 KW | 15 KW | 18kW | 20 KW |
|---------------------|---|---|-------|-------|-------|------|-------|
| SAFETY PROTECTION   | PV Manual Isolator / Reverse Polarity Protection              | Included                                |       |       |       |      |       |
|                     | PV String Reverse Polarity Protection                         | Included                                |       |       |       |      |       |
|                     | All-pole Sensitive Residual Current Monitoring Unit           | Included                                |       |       |       |      |       |
|                     | Battery Reverse Polarity Protection                           | Included                                |       |       |       |      |       |
|                     | Anti-Islanding Protection                                     | Included                                |       |       |       |      |       |
|                     | AC Output Over Current Protection                             | Included                                |       |       |       |      |       |
|                     | AC Output Short Circuit Current Protection                    | Included                                |       |       |       |      |       |
|                     | AC Over Voltage Protection                                    | Included                                |       |       |       |      |       |
|                     | Protection Class (As Per IEC 62109-1)                         | Included                                |       |       |       |      |       |
|                     | Over Voltage Category (As Per IEC 62109-1)                    | AC : III ; DC : II                      |       |       |       |      |       |
| GENERAL DATA        | Power Factor At Rated Power                                   | 0.8 leading to 0.8 lagging              |       |       |       |      |       |
|                     | Dimensions (W x H x D) (mm)                                   | 535×465×215mm                           |       |       |       |      |       |
|                     | Device Weight   | 20kg                                    |       |       |       |      |       |
|                     | Installation  | Wall-mounted                            |       |       |       |      |       |
|                     | Operating Temperature Range                                   | -25 °C ~ +60 °C                         |       |       |       |      |       |
|                     | Noise Emission (Typical)                                      | < 35 dB (A)                             |       |       |       |      |       |
|                     | Standby Consumption (On Grid)                                 | < 25 W                                  |       |       |       |      |       |
|                     | Cooling Method  | Forced Convection with Smart Activation |       |       |       |      |       |
|                     | Ingress Protection Rating (As Per IEC 60529)                  | IP66                                    |       |       |       |      |       |
|                     | Max. Permissible Value for Relative Humidity (Non-Condensing) | 0 ~ 95%                                 |       |       |       |      |       |
| FEATURES            | Max. Operating Altitude                                       | 4000 m (> 3000 m power derating)        |       |       |       |      |       |
|                     | Inverter Topology (PV/Battery)                                | Transformerless                         |       |       |       |      |       |
|                     | User Interface  | LED & App                               |       |       |       |      |       |
|                     | Communication with BMS  | CAN                                     |       |       |       |      |       |
|                     | Communication with Meter                                      | RS 485                                  |       |       |       |      |       |
|                     | Communication with Portal                                     | Wi-Fi Logger                            |       |       |       |      |       |
| STANDARD COMPLIANCE | Integrated Power Control / Zero Export Control                | Included                                |       |       |       |      |       |
|                     | Safety  | EN 62109 - 1, EN 62109 -2, EN 62477-1   |       |       |       |      |       |
|                     | EMC   | IEC 61000-6-1 / -2 / -3 / -4            |       |       |       |      |       |



**50A**  
Charging Current



**IP66**  
Weather Protection



**WIFI**  
Wireless Communication

# TH SERIES

THREE PHASE INVERTER

## NooR APP MAKE YOUR LIFE EASIER

WeCo mobile app offers convenient and out-of-the-box monitoring of WeCo Energy Storage Systems, allowing users to manage everything with just a few taps.



**WECO**

WeCo Srl a Socio Unico  
Viale J. F. Kennedy 113-121  
50038 Scarperia e San Piero  
Firenze, Italy

weco@wecobatteries.com  
www.wecobatteries.com



Images herein are for demonstration only and may not reflect final product outlook. Confirm current data with WeCo before purchase.  
Unauthorized use, copying, or reproduction of design, logo or content is prohibited. WeCo is a registered brand of WeCo Srl Italia.