

# TG Series installation guide

**new grid  
connect  
inverter**



# contents

<b>carton parts</b>	<b>01</b>
<b>before installation</b>	<b>02</b>
<b>installation location</b>	<b>03</b>
<b>fixing the hanging bracket</b>	<b>04</b>
<b>mounting the inverter</b>	<b>06</b>
<b>DC connection</b>	<b>08</b>
<b>AC connection</b>	<b>09</b>
<b>summary specifications</b>	<b>13</b>

# carton parts

Wall mount bracket	01
TG Series Inverter	01
Wi-Fi antenna	01
DC cable with MC4 (m) connector	02
DC cable with MC4 (f) connector	02
M4 x 12 phillips head fixing screws	02
Wieland gesis AC connector	01
Warranty card	01
Owner manual	01
Quick install guide	01
	01

# before installation

**Check the inverter has no signs of cosmetic damage and the box contents are complete**

Select a suitable location for the inverter, it must be mounted in a well-ventilated and shaded area away from direct sunlight.

The installation shall only be performed by a qualified electrician and in accordance with the relevant standards applicable to local regulations such as AS/NZS 4777, AS/NZS 3000 and AS/NZS 5033.

All work is to be performed by suitably qualified and licensed persons.

Please be mindful when installing or removing inverter off its bracket, we recommend using 2 people due to its size and weight.  
Approx Weight 27kg.

# installation location

## **Inverter must not be**

- Installed in direct sunlight.
- Mounted on flammable material.
- Located such that it can inadvertently be touched, as it can become hot during operation.

## **The inverter must be**

- Mounted in the vertical position.
- Located in a well-ventilated area.

## **The inverter must have the following clearances**

- 100mm to the left and right.
- 500mm to the top and bottom.

**Ensure the mounting surface is structurally sound.**

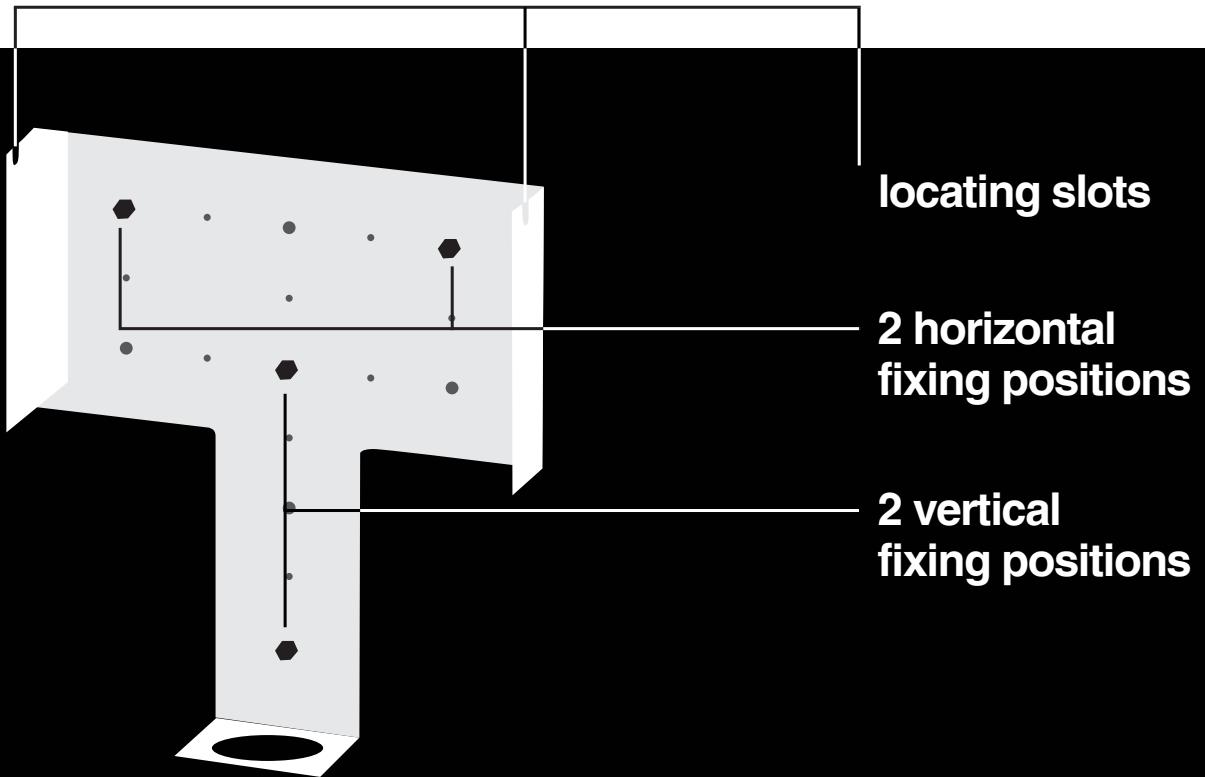
**All fasteners should be rated to carry a minimum of 40kg.**

The inverter should be installed in an unobstructed location that is accessible at all times without the use of ladders or similar equipment. Suggested height is at eye level with the LCD display.

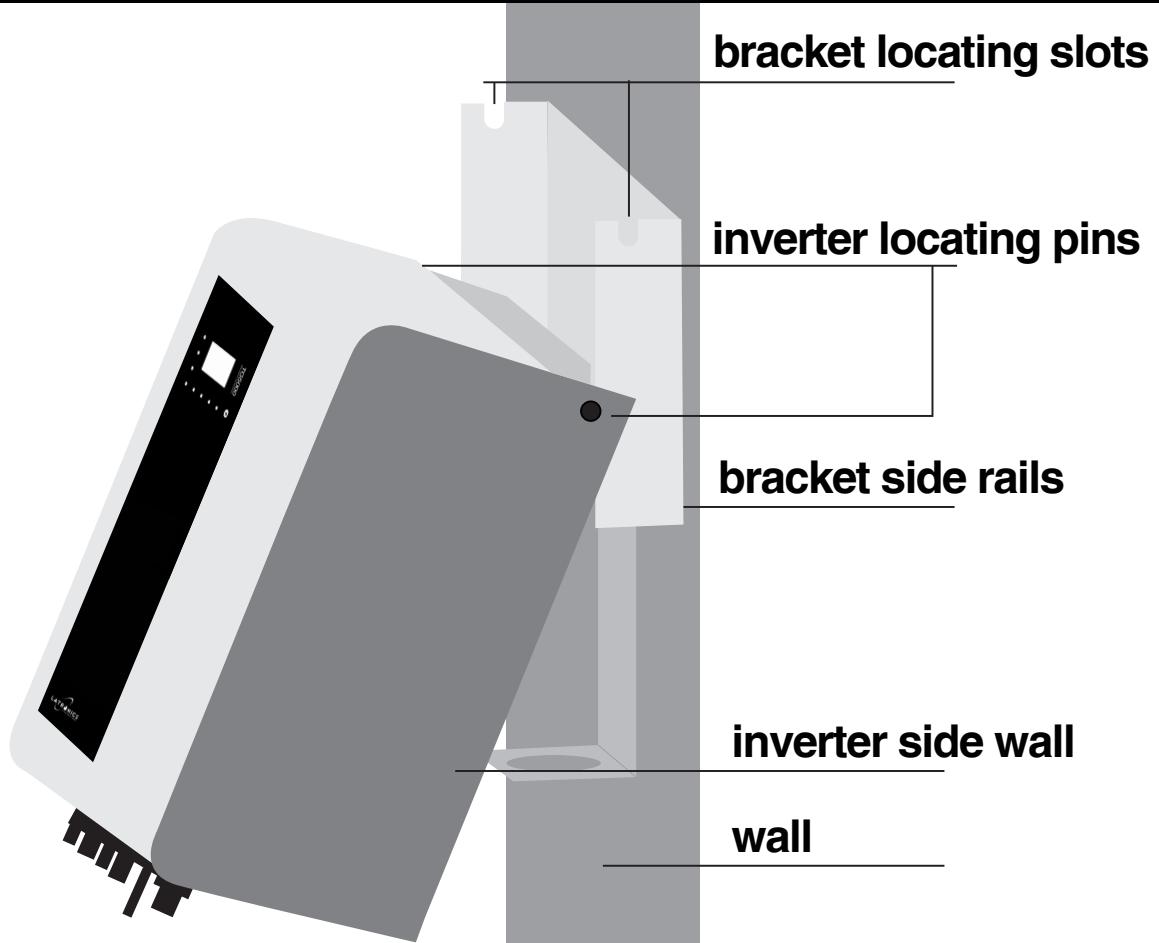
# fixing the hanging bracket

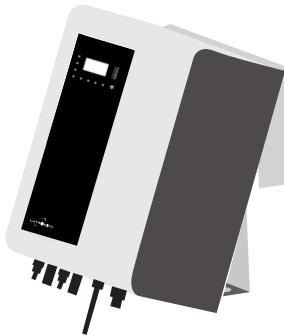
**When mounting the inverter bracket ensure that**

- At least two vertical and two horizontal mounting holes are used.**
- The height of the fastener head must not exceed 8mm to avoid clashing with the heat sink fins.**



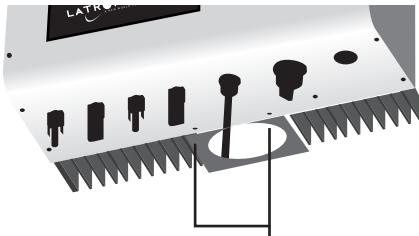
# mounting the inverter





**Inverter locating pins**

**Bracket side rail**



**Fixing screw holes**

1

Align the inverter with the bracket such that the bracket side rails sit in the gap of the locating pins.

2

Rest the inverter locating pins on the bracket side rails.

3

Slide the inverter up and over the bracket side rails.

4

Ease the inverter toward the wall until the locating pins slide into the locating slots on the bracket side rail.

5

Return the inverter to vertical position ensuring that the lower bracket fixing screw holes are hidden behind and aligned with the cover holes.

6

Fit the 2 supplied M4 screws (recommended torque = 1.4Nm). Do not over tighten.

7

Fit Wi-Fi antenna

# DC connection

The TG Series Inverter is supplied with MC4 cable assemblies to simplify connecting the PV array at the inverter.

Check the maximum open circuit voltage of each solar array will not exceed the maximum inverter input of 500V, taking into consideration the array may be subject to low temperatures.

An approved means of DC isolation and circuit protection is required for each PV array feed, and must be installed adjacent to the inverter. The DC circuit protection must be a 20A non-polarised DC circuit breaker. This enables the inverter to be isolated for maintenance purposes.

Observe polarity.

Ensure the DC isolators are switched off before connecting the DC cable assemblies provided. They must be cut to length and connected according to wiring standards.

# AC connection

g

The unit is supplied with a female 25Amp Wieland Gesis lockable AC connector for connection to the inverter. The TG Series Inverter requires a 25A external AC circuit breaker for protection of the inverter's AC input. This is usually situated in the main switchboard and/or next to the inverter.

To install connectors please use the following procedure.

Turn external AC Circuit Breaker switch into OFF position and make sure it cannot be switched back on.

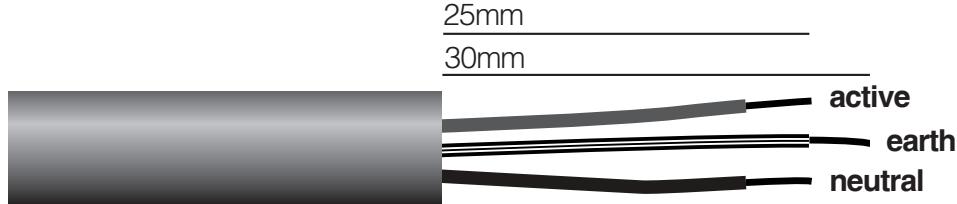
Test the wiring with a voltmeter to make sure no voltage is present.

Remove 30mm of outer cable jacket and cut Active and Neutral cores 5mm shorter than Earth.

Strip off 5mm of sheath from all cores as shown over the page.

1

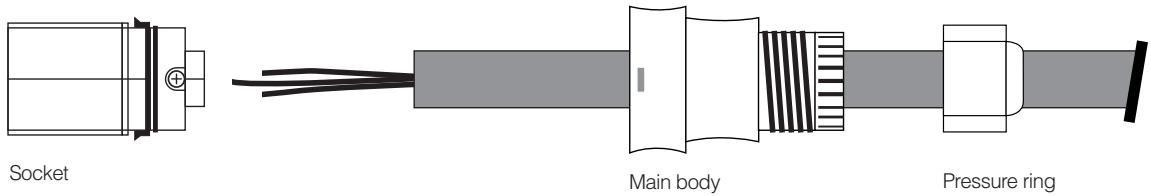
**Use round 4 sq mm twin and earth flex.**



- == Active and neutral cut to 25mm
- == Earth cut to 30mm

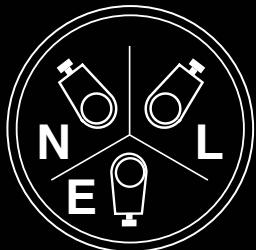
2

**Take the wieland gesis connector, disassemble into three main sections and insert stripped wire through as shown below.**



3

**Connect the active, neutral and earth cables as per diagram.**



**N - neutral  
L - active  
E - earth**

4

**Recommended screw terminal tightening torque 0.8 – 1.0Nm.**

5

**Push the socket back into the main body until it clips in.**

6

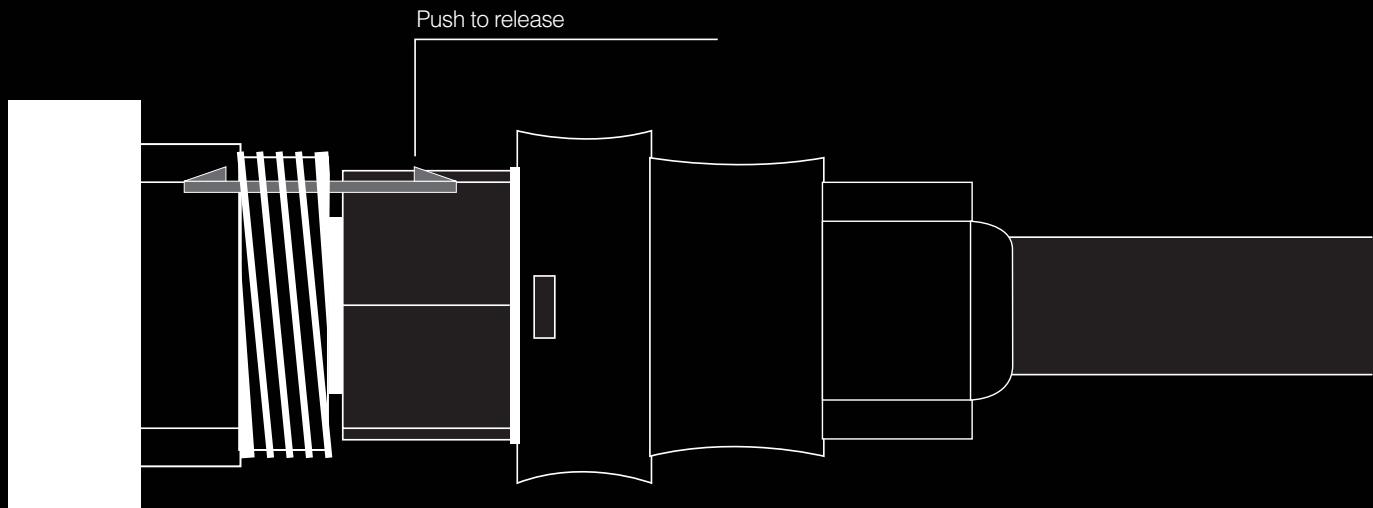
**Screw the pressure ring back on to form a tight seal (recommended tightening torque 4Nm).**

7

**Plug into the corresponding connector on the inverter.**

8

**To disconnect the plug, simply push the release clip in and unplug.**



# **summary specifications**

## **TG Series**

# **Inverter**

### **TG5000 / TG4600**

Absolute max. input voltage	500V
Start input voltage	150V
Max. input current per channel	15A
Independent MPPT inputs	2
Max AC Power	5500W / 5000W
Dimensions (mm) (W / H / D)	400 / 450 / 185
Weight	27kg

For full specifications please see owner manual

# Made in Australia

**www.latronics.com.au**  
**info@latronics.com.au**  
**1300 550 204**

0904-0002-V1.0