PV Inverters from the World's
Largest Power Electronics Company

Delta RPI: 3kW

Grid-connect PV Inverter

RPI Home Series: H3 (single tracker)

Product Features

- Transformerless design
- Wide voltage range
- Class-leading peak efficiency of 97.5% for 3-5kW systems
- IP65 protection level
- Power limiting options available
- Built-in AC/DC isolation switch
- Aluminium die-cast enclosure
- LCD display
- Fanless design
- Easy installation
- Wall mountable

5 YEAR WARRANTY

Delta offers 5 year warranty as standard across its entire range of PV inverters in Australia and New Zealand. This warranty is backed by the world's largest power electronics company and a global leader in electronics manufacturing.

DELTA

High Efficiency Performance

Class-leading efficiency up to 97.5% for 3-5kW systems, using advanced transformerless topology developed by Delta, the global leader in power electronics. The efficiency is consistent across the entire voltage and power range, providing reliable performance.

Wide Working Voltage Range

Ultra-wide operating voltage range from 125-550V allows greater flexibility in string configuration. Even under harsh environmental conditions, the wide MPPT range makes it easy to configure PV arrays to stay within the maximum power operating range.

AC/DC Safety Switch

To ensure safety during installation, the inverter is equipped with a mechanical AC/DC switch that is designed to manually disconnect both AC and DC power sources simultaneously. At this point, the inverter is completely powered off to prevent the possibility of electric shock.

Communication Options

The inverter is equipped with a standard RS485 communications port and a digital input interface, which provide options to connect an external third party zero export control device.

High Quality Design

Revolutionary light and compact design, with a robust die-cast enclosure to maintain quality and durability. Each inverter satisfies IP65 protection level and undergoes highly accelerated life testing (HALT) and rigorous reliability testing.

Simple installation

The lightweight, compact design and unique wall bracket allow easy and cost efficient installation. Universal multi-contact MC4® DC connectors allow fast and safe connections.

Passive Cooling

Innovative heat-sink design for passive cooling, which reduces the operating temperature of the inverter through a natural convection process without the need for noisy, unreliable fans to dissipate the heat. The enhanced cooling helps to protect sensitive electrical components and extends the life of the inverter.

Additional Features

External Alarm: Compliant with IEC62109, the inverter is equipped with an internal dry contact, which can be configured to trigger in case of earth faults.

Power Quality: Various active and reactive power factor modes. Constant cos (ϕ) is the most common setting for Australia.

About Delta

Delta is the world's largest power electronics company and a leading manufacturer of switching power supplies, telecom power supplies, DC brushless fans, thermal management solutions, industrial automation, datacentre solutions, networking, and renewable energy products. With over 40 years' experience in manufacturing, Delta specialises in OEM and ODM, meaning it designs and manufactures electrical products for some of the largest electronics brands in the world.

Headquartered in Taiwan, Delta's entire global operation consists of over 153 offices, 38 manufacturing plants, 60 R&D centres, and 70,000 employees dedicated to the pursuit of innovative and efficient technologies that deliver the brand's promise of: "Smarter. Greener, Together."

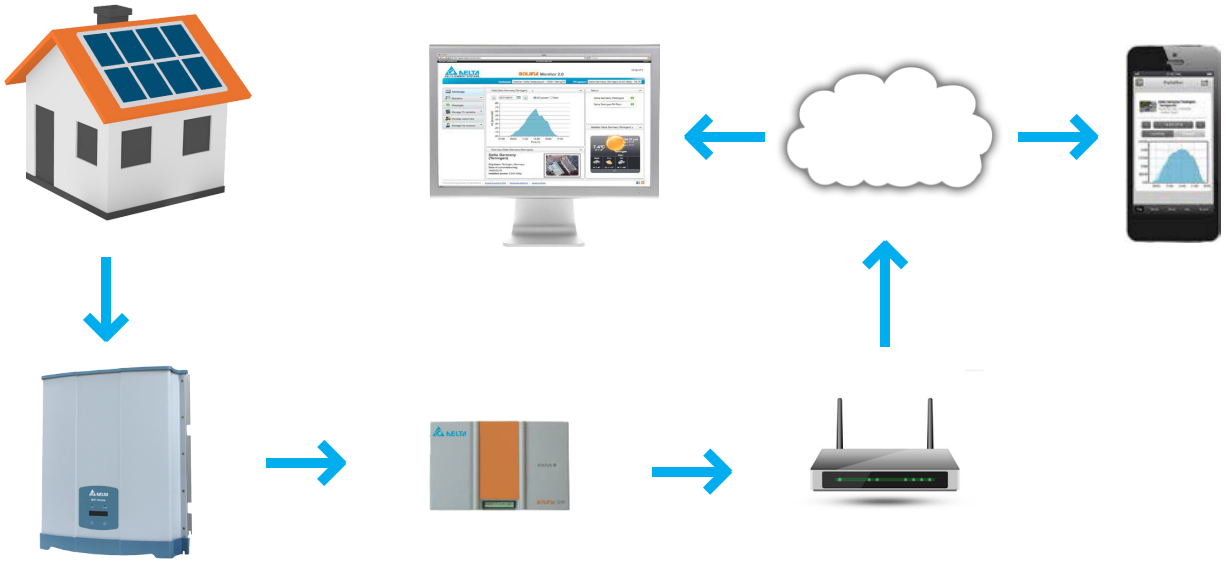
Delta's vision for a greener, cleaner, more energy-efficient future, is inspiring people to change the way they manage and consume energy. Leading by example, Delta's green manufacturing processes, recycling and waste management programs and the construction of Diamond and Gold LEED certified green buildings has earned its place in the Dow Jones Sustainability™ World Index (DJSI World) for the last four years.

Delta began developing its solar inverters at its German research and development centre almost 20 years ago and, with their unsurpassed experience in power electronics, have been able to achieve some of the best in efficiency, reliability and power conversion rates in the industry, with leading efficiencies including:

- the world's first server power supply certified as 80 Plus Titanium, with over 96% efficiency,
- PV inverters at up to 98.7% efficiency,
- switching power supplies at over 90% efficiency, and
- telecom power with up to 97.5% efficiency.

Smart Logging & Monitoring Interface

Relevant system information and settings are displayed on the inverter's compact LCD graphics display. An easy push button interface allows access to important data stored within the internal data logger. More detailed and up-to-date information on the inverter's performance can be obtained by connecting an external monitoring device. The built-in RS485 communication interface will transfer the relevant inverter data to the connected monitoring interface from which it can be accessed through the internet or a suitable mobile phone app. Information about the system's electricity generation will be uploaded automatically at regular intervals, and stored for up to 10 years.



Warranty & Technical Support

Delta was the first brand to offer 5 year warranty as standard across its entire range of PV inverters in Australia and New Zealand. This warranty is backed by the world's largest power electronics company, a global leader in electronics manufacturing.

Delta's state-of-the-art production facilities and quality control ensure the highest level of reliability and longevity of our inverters, while our local office and dedicated service team provide the very best technical and engineering support.

Inverter Efficiency

The efficiency graph shows how well an inverter will perform under different load conditions. Depending on the amount of sunlight or the time of day the inverter will operate at different load levels. An inverter that can cover a wide power range with high efficiency will perform better delivering higher overall yield. Apart from array power output the efficiency is also affected by the voltage level of the PV string.

Technical Specifications

Input (DC)	H3
Maximum recommended PV power	3,780W
Maximum input voltage	600V
Operating voltage range	125 ~ 550V
MPP voltage range	125 ~ 500V
MPP voltage range - full power	320 ~ 500V
Start-up voltage	150V
Nominal voltage	350V
MPP trackers	1
Maximum input current	10A
Connection type	2 pairs MC4
Output (AC)	
Maximum apparent power	3,000VA
Power limiting options	2,490VA / 2,990VA
Maximum output current	14.3A
Rated voltage	230V
Operating voltage range	-20% / +22%
Operating frequency range	50 / 60Hz ± 5Hz
Power factor (adjustable)	0.8 ind ~ 0.8 cap
Total Harmonic Distortion (THD)	<3%
Night time loss	<1W
Efficiency	
Peak efficiency	97.00%
Euro efficiency	96.20%
Information	
DC Switch	Yes
Communication port	RS485 / Dry contact
Display	LCD 16 characters x 2
Certification	
	VDE-AR-N 4105 | AS4777 | AS3100 IEC 62109-1/-2 | EN 61000-6-2 | EN61000-6-3
General Data	
Operating temperature range	-25 ~ 60°C
Protection level	IP65
Cooling	Natural convection
Dimensions (W x H x D)	475 x 415 x 157mm
Weight	15kg
Delta part number	RPI302N63E0000

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